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18 October 1985

USSR Report

AGRICULTURE

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MAJOR CROP PROGRESS AND WEATHER REPORTING

PROGRESS, PROBLEMS IN UKRAINIAN HARVEST OPERATIONS

Moscow SELSKAYA ZHIZN in Russian 31 Jul 85 p 1

/Article by S. Luzgan, Ukrainian SSR: "Harvest Tactics Dictated by the Fields"/

/Text/ The grain harvest is in progress in all oblasts of the Ukraine. More than 13,000 harvesting-transport detachments have joined in the work.

A light rain fell during the night, almost as if by schedule. But nevertheless the harvest operations were being carried out at a maximum tempo when the secretary of the Mironovskiy Rayon Party Committee V. Slinchuk and I arrived on the fields of the Kolkhoz imeni Shevchenko. The harvester operators were laying out uniform rows of peas and wheat and the combine operators were threshing the clean grain using the direct method. In their wake the machine operators were stacking the straw, loosening the stubble and tilling the soil for winter crop sowing.

"The unstable weather has required certain corrections to the plans composed earlier" stated N.V. Babyak, the kolkhoz chairman, "In order not to lose even one good hour of the summer period, a change had to be made during operations. We are carrying out two-stage harvesting and straight combine harvesting simultaneously, even though prior to the commencement of the harvest we planned to lay out in windrows as much of the grain crop as possible. We are harvesting on a two-stage basis only those plantings which are severely contaminated. Thus we are prompted by experience and by the dictates of the fields."

It was at a sovkhoz of the Mironovka Sugar Combine that I noted the following: in one sector the harvesters were mowing the peas, barley and wheat and in another the combines were employing the straight combine harvesting method. The sovkhoz director, B.Ya. Kolinko, as though he was continuing an unfinished argument with somebody, stated: "Why mow in those areas where straight combine harvesting can be employed? If there is a rainfall, it is impossible to pick up the water-logged windrows. Standing wheat dries out quickly. It is clean, of low height and it begs for combine operations. It is another matter if the wheat is of waxy ripeness; the work can be started earlier and time can be saved. The grain moves immediately from the combine to a threshing floor and thereafter it is processed and shipped to an elevator. You can see how our combine operators "shave" a field. A low cutting -- more straw. But when

we mow this wheat the stubble must be left higher so as to ensure more rapid ventilating of the windrows."

"You do not have to give a lecture, Boris Yakovlevich" joked the secretary of the rayon committee, "on how to harvest grain. You decided this yourself during the seminar. You now simply must act as agreed upon in accordance with the existing situation. Would it not be better to say what the yield should be and how the machine operators are performing?"

"The peas are still furnishing 39 quintals and the wheat -- 45 quintals. A harvest is at hand. And it must be gathered in despite the inclement weather. The machine operators are striving to do this. Dmitriy Kazachok and his son Yuriy are doing the work of four, as they lay 30 hectares of peas in windrows each day. The Tarasevich crew is the leader in threshing work. The personnel are endeavoring to transport the grain and also to stack the straw."

Sometime later, this same matter was discussed by the 1st secretary of the Mironovskiy Rayon Party Commmittee V.T. Polivod.

"This year the grain crop has turned out to be more difficult" reflected Vasiliy Trifonovich, "True, it has never been easy. However, this year we have been tormented by the rainfall. As the saying goes, one cannot doze in such a situation but rather full consideration must be given to the existing conditions. The leaders, specialists, party organizations and all agricultural workers are well aware of this fact. Twenty thousand tons of grain from the new crop have been shipped to the state's granaries. The farmers in many other rayons in Kiev Oblast commenced this year's harvest campaign in just as organized a manner. However, a positive evaluation would also reveal that a number of farms and even rayons were unable to counter the inclement weather conditions with their efforts and expertise. For example, in Kagarlykskiy Rayon, the fields of which I happened to visit, a number of farms relied upon two-stage harvesting and were unable to switch over or to change their maneuvers during operations.

Today the most important task in the Ukraine is that of carrying out the entire complex of harvesting operations in a rapid and high quality manner and ensuring highly productive use of the equipment and transport means during all types of weather both day and night. Owing to an excessive amount of moisture in all of the zones, a great amount of green material has appeared in the plantings. However, these objective difficulties can be "compensated." Winter wheat is being cultivated on 1.5 million hectares throughout the republic using the intensive technology. Despite the fact that this innovation is being employed in a simple manner, the sowings nevertheless promise to provide a good yield. They will require special attention during the harvest work. This is called for in recently published measures, outlined by the CPSU Central Committee and USSR Council of Ministers in the interest of increasing the production and sale of high quality wheat grain to the state. Commencing with this year, high bonuses have been established for adding on to the purchase price for such grain and next year a requirement will exist for mastering the progressive technology on larger tracts of wheat.

This present harvest campaign is a type of operational test for the entire agricultural industry. Preparations were made for it in the Ukraine. Today,

with all of the rayons engaged in the mass harvesting of early grain crops, more than 13,000 harvesting-transport detachments are in operation throughout the republic. They can literally cope with the work in a matter of days.

More than 7 million hectares have been harvested. The shipments of grain to the state are increasing. However the increasing tasks and weather conditions require a self-critical evaluation of the course of this very important campaign. This is particularly true in view of the fact that in past years the republic's harvest campaign has continued for more than a month. Yes and this year it is already lasting for more than 2 weeks.

Recently an authoritative conference was held in the Central Committee of the Communist Party of the Ukraine. It was noted during this conference that some collectives were characterized by a high level of organizational ability and others by serious shortcomings during the course of the harvest campaign. On a large number of farms in Kherson, the Crimean, Odessa, Nikolayev and Zaporozhye oblasts, not all of the combines and harvesters were included in the operations and a considerable number of them were either not hermetically sealed or poorly adjusted. This is restraining the rates and resulting in grain losses.

Unfortunately, such shortcomings are being tolerated by many farms in the central oblasts where the "peak" of the harvest campaign is now centered. Moreover, full preparations were not made here for processing the damp grain and it is beginning to accumulate on the threshing floors. In a number of rayons and even oblasts the authorities were unable to change the harvesting tactics defined earlier and dictated by the weather. Recently, aware that the decision had been made in Chernigov Oblast to harvest all of the early grain crops using only the two-stage method, I held a conversation with a group of leaders from this oblast. They convinced me that the harvesting methods will be determined by the specialists and the grain growers themselves. But I open up the oblast newspaper DESNYANSKA PRAVDA in which a report on a meeting of the party-economic aktiv was published. Unfortunately, it is emphasized in the report that all of the grain crops must be harvested using only the two-stage method. Why was such a command issued?

This year the weather conditions dictate a need for freedom to maneuver. The fields themselves the harvest tactics.

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MAJOR CROP PROGRESS AND WEATHER REPORTING

GRAIN HARVEST PROBLEMS IN UKRAINIAN SSR DISCUSSED

Moscow IZVESTIYA in Russian 26 Jul 85 p 2

/Article by V. Kovalevskiy, S. Troyan and F. Chernetskiy; Odessa, Nikolayev and Kherson: "On Drought Conditions -- To the Accompaniment of Rain"/

/Text/ By nightfall the clouds had already gathered. And together with Nikolay Serafimovich, the chief of a mechanized detachment at the Kolkhoz imeni XX Syezda KPSS in Kominternovskiy Rayon in Odessa Oblast, who had arranged matters at the field camp, we stood on the veranda and discussed what measures could be taken to counter the drought conditions, while the rain fell in a monotonous manner. Generally speaking, dry winds and intense heat are frequent guests in these regions. Thus we were reflecting upon what was typical for the southern part of the republic.

The detachment of N. Dovbenko is recognized throughout the oblast as a collective of skilled machine operators and masters at carrying out grain operations. It has been assigned two crop rotation plans -- more than 400,000 hectares of arable land -- practically all of the kolkhoz's grain fields. Fine yields are being obtained here. Certainly, it is difficult under drought conditions but they nevertheless are still able to carry out their work. For example, during the extremely unfavorable year of 1983 the Kolkhoz imeni XX Syezda KPSS obtained 23 quintals per hectare, while the average grain yield for Kominternovskiy Rayon was only 15

"If we summarize the situation, then it would appear that we countered the drought conditions with a high level of organization and a well thought out technology. And obviously also with the collective contract" stated N. Dovbenko and thereafter he cautioned: "Do not hurry with questions as I will explain everything presently. Prior to the creation of the detachment -- 6 years ago -- the farm's grain yield was on the order of 22-23 quintals. It is presently 10 quintals greater. And indeed earlier there were 50 machine operators working out on the grain fields and today -- only 30. Could it be that a certain change took place in the grain operations as a result of the collective contract? I think not. Use was made of that which was known long ago and which was available to all. But the attitude towards work changed. All work began to be carried out in a conscientious manner and in the interest of obtaining maximum results. How often was mention made at the kolkhoz of the non-mouldboard method for tilling the soil? But the work did not improve. And they converted over to the contract -- within 2 years all of the winter crop

fields were being worked using a moisture conserving technology borrowed from the workers in Poltava Oblast. And there was still a question: what should be sown in the autumn? The overall interest in yields brought about an intense study of the varieties. For example, Odesskaya-127 had been replaced by Eritrospermumom-127 -- an early ripening variety which makes it possible to avoid the "peak" drought periods. They created their own test plot and for several years they have been testing the new varieties Peresvet, Obriy, Lan and Yuzhnaya Zarya.

"Permit me now to mention still another detail. Our detachment is a cost accounting one and thus economies and a thrifty attitude are considered to be operational necessities. Last year the collective received 50,000 rubles worth of additional payment. What was this sum for? 24,000 rubles -- for the over-fulfillment of production tasks and 26,000 rubles -- for economies in the use of financial, material and labor resources. For example, we prepare almost all of the equipment ourselves and we assign the best machine operators to carry out the repair work. Thus it often happens that we can make do with just one repair operation instead of two as called for in the plan. No, our machines are not allowed to succumb to wear and tear. Nor can there be any discussion in this regard. Or take the matter of soil preparation. It is possible to pack down a field several times and it is also possible, if a unit consists of separate implements, to manage with just one run. Hence a savings is realized in terms of time, fuel and wage fund. In addition, improvements are achieved in both the quality and schedules. Moreover, there is an increase in yield."

One must necessarily agree with the above. If the labor collectives display no interest in improving their work and if such a desire does not become one of their inner requirements or needs, there will be no point to even discussing production intensification or an acceleration in scientific-technical progress. Thus greater urgency is being attached to the question of independence, which must not simply arouse interest in research work and intelligent management but rather it must make it a norm of life.

The problem is multiple-plan in nature. And it can be viewed from various standpoints. In the office of the secretary of the Odessa Oblast Party Committee M. Galich, there is a diagram which describes the productivity of the winter crop fields. Various colored lines indicate the sowing areas, the productivity and gross output; intricate zig-zag lines reflect the complicated life of the grain fields over a 20 year period. And these zig-zag lines pose difficult questions. For example, why is it that the sowing areas are increasing in size while gross output is not increasing and in fact is even decreasing? The average annual gross yield of grain during the 8th Five-Year Plan was 2,340,000 tons, during the 9th -- 2,716,000, during the 10th -- 2,713,000 and during 4 years of the current five-year plan -- 2,250,000 tons. And the areas? Compared to 1960 when winter crops were planted on 609,000 hectares, in 1980 -- almost 800,000.

"Here the area types must be defined more precisely" stated Mikhail Grigoryevich, "This green line represents the areas sown in winter crops. Below -- the brown line -- the areas harvested. Thus you can see what has been sown and what has been harvested. The difference is considerable. In 1970, 636,000 hectares were sown and 417,000 hectares of grain harvested. For 1980, the

figures are 772,000 and 519,000 respectively. Large quantities of the winter crops perish. Moreover, there is a regularity here: the larger the areas, the higher the proportion of losses. Thus the crop rotation plans are disrupted -- many winter crops must be planted following stubble predecessor crops. As a result and in addition to a decline in the winter crops following the wintering period, there is also a general decline in productivity. Whereas the average yield following bare fallow is 35 quintals, following stubble predecessor crops it is less by a factor of three. Other complications surfaced during this current five-year plan. Earlier the winter crop fields lacked the strength required to endure the wintering conditions. They were damaged by the spring and summer dry winds. It now appears as though the drought conditions have expanded their area of influence and are now affecting a portion of the autumn period. Quite often we plant seed in the soil on the off-chance and in the hope that rain will soon be falling. And if rain does not arrive? Our accounting for such losses is very poor. It is time we learned how to select an effective maneuver. Last year we reduced the oblast's winter crop fields by 150,000 hectares."

"Must it be assumed that this reduction will bring about a reduction in grain production?" we asked.

"By no means. The oblast's farms are now able to have 150,000 hectares of bare fallow and they have almost doubled their sowings of peas and perennial grasses -- wonderful predecessor crops for grain. Computations reveal that even with these reduced areas the farms are potentially capable of producing up to 3,400,000 tons of grain. This will ensure stable procurements and it will satisfy our internal requirments."

"Was your use of the term 'potentially' an accident?"

"As is well known, computations do not always coincide with practical results. For example, it is known that a hectare of bare fallow must furnish 40-45 quintals of grain. But it must be nurtured well if it is to produce such a return. Meanwhile, a proper attitude towards the fallow fields is not being displayed in all areas. Only one half of the oblast's fallow fields are being plowed in the autumn and the remainder -- in the spring. Yes and the key to a good harvest also includes proper tending of the crops, adequate moisture and moisture retention. But we still are unable to boast about the introduction of a moisture retention soil cultivation system. Yes and the collective contract, in the form in which it is being used in N. Dovbenko's detachment, is not being disseminated as actively as it should."

Thus the reserves and "painful points" of farming have been indicated. Moreover, they are typical not only of Odessa farms.

In Nikolayev Oblast, where our subsequent route took us, the yields, at least according to local standards, are average -- they were also affected by the autumn and spring drought conditions. Statistics reveal that sharp changes are always observed in the grain productivity and gross yields here. However, over the past 5-6 years, grain production has stabilized at 2 million tons. The influence of the weather has not been too noticeable. The specialist believe that the introduction of the moisture- conserving soil cultivation technology

has alleviated to a considerable degree the effects of drought conditions on a crop.

The chairman of the Pobeda Kolkhoz in Novoodesskiy Rayon, F. Buchatskiy, computed the gain from the use of such a technology by points:

"First of all, the gross grain yield increases. Yes and how could it not but grow: in past years, roughly one third of the winter crops was resown in the spring and now -- less by a factor of three. Secondly, in those areas where three tractors worked the soil earlier, today -- only two and, it follows, a corresponding reduction in the number of machine operators. The fuel requirement has been reduced by one third. In short, at the present time we cannot conceive of working the grain fields in the absence of sweeps."

Actually, the advantages of the moisture-conserving soil-protective technology were proven long ago. But even today, regardless of where a discussion takes place, references are made to an acute shortage of machines and implements. And in all areas they dream about the AKP-2.5 unit, which makes it possible to carry out a complex of necessary operations during just one pass. But such units are not available. Thus the farmers must pack down a field three and sometimes four times, using first a shallow plow, then a sweep and finally harrows. It is useless to spend time and fuel if the best periods are to be overlooked; the soil will suffer. In addition, there will be losses in yield.

Certainly, if a shortfall in grain is unacceptable on conventional arable land, then it is twice as sinful to obtain less than the full measure from fields guaranteed against all types of adversities. Here we have in mind irrigated fields.

The grain fields in Kherson Oblast, which are cultivated under irrigation conditions, are the largest in the Ukraine. With each passing year, the grain growers in Kakhovskiy Rayon utilize their irrigated land more effectively. During the 9th Five-Year Plan, for example, the rayon obtained an average of 35 quintals of grain per hectare from its irrigated fields, during the 10th -- 42 and during 4 years of the current five-year plan -- 48.6 quintals per hectare. Last year was most productive -- 54 quintals per hectare.

Generally speaking, the path leading to such results of the secret is not prepared for any particular person. We were informed of this out on the wheat fields which generously provided the grain growers with a yield of 55 quintals per hectare, by the director of the sovkhoz-technical school S. Barabash and the chairman of the Ukraina Kolkhoz G. Yakushchenko.

Briefly, the use of this same collective contract could be of assistance here in achieving the planned yields for all crops and even for exceeding these yields. The collectives of 50 mechanized cost accounting detachments have become sovereign masters of all of the rayon's irrigated fields. The collective of the Poliv Production Association is proceeding hand in hand with them and also on a cost accounting basis. The wages of the irrigation system operating personnel have been established in a manner so as to be directly dependent upon the yields. True, it is possible to discuss further improvements in the relationships between the farmers and their partners, in view of the fact that many opportunities have still not been used here. But even in the face of today's shortcomings, the results are readily apparent.

Mention should be made of the results realized from irrigated fields in Kherson Oblast on the whole. For example, the average annual grain yield during the 9th Five-Year Plan was 37.5 quintals per hectare, during the 10th -- 40 and during 4 years of the current five-year plan -- 39.5 quintals per hectare. In the case of a majority of crops, the oblast's farms did not achieve their planned yields.

The harvest period was late this year in the Ukraine. Its rates were slowed down by rainfall. And now this lag must be made up. At the same time, not one kilogram of grain should be harvested in haste, but rather all of the crops grown must be harvested in a thrifty manner. This must be the main purpose of the work being carried out by the APK /agroindustrial complex/ workers and they must spare no effort in carrying out this work.

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MAJOR CROP PROGRESS AND WEATHER REPORTING

GRAIN PRODUCTION PLANS FOR VOLGOGRAD OBLAST

Moscow IZVESTIYA in Russian 26 May 85 p 1

[Article by A. Chemonin, Volgograd Oblast: "Consideration of Quality"]

[Text] They are awaiting a large harvest in Volgograd Oblast. the scientists and practical workers have analyzed the results of the stern winter, they have taken into account the character of recent days and they have drawn a conclusion: by no means do cold and prolonged spring periods always cause harm to the crops. Here there is always sufficient heat for normal plant growth. Judging from all appearances, the land is supplied with a considerable amount of moisture. The major task is that of ensuring that the sowing work is carried out in an intelligent and creative manner.

The chief of the oblast's agricultural production administration, N. Mamontov, shares some impressions:

"I visited the Put' Khleboroba Sovkhoz in Ilovlinskiy Rayon and met with an old friend, team leader Aleksandr Nikolayevich Vinograd. The machines were standing idle and the fields basking in the sun. I said to him, 'You are sitting down--why aren't you cultivating?' He answered: 'We have harrowed all of the fields and yet we are unable to cultivate in all areas owing to the fact that the soil is cold. Let the weeds sprout, it is sunny and pleasant at the present time.' The assessment was correct. Rates for the sake of rates are not needed."

And he added: "In the face of such additional risky delays, it would seem that the sowing of early grain crops would be carried out very rapidly throughout the entire oblast -- within 5 days. Moreover, high quality field operations have been noted in all areas. This time the front of the sowing campaign has not advanced together with the heat, from south to north, as is usually the case. They have commenced sowing operations practically simultaneously in all areas."

This year a team for the tending of fallow has been established in the usual structure for the tractor and field crop production brigades. No longer is there undefined responsibility in this important work, such as was the case when the entire brigade was held responsible. The fallow is plowed up by the entire brigade and subsequently the field is turned over to a team which is responsible for it right up until the crop is harvested. It carries out the sowing work, it tends the plantings and yet once again the harvest work is

carried out by the entire brigade: here one team, usually consisting of two individuals, is not capable of handling 1,000 hectares.

At the Rassvet Kolkhoz in Mikhaylovskiy Rayon, work in a brigade is paid for in the following manner: K-700 tractor machine operators are paid an advance of 5 rubles and 85 kopecks for a working day (this is the average rate for a normal shift for machines of this class. For healthy seedlings, the machine operators on a team are paid 1 additional ruble per hectare, or 2 kilograms of grain for the same area. In other words, for healthy seedlings each of the two machine operators will receive 500 rubles or a ton of grain for a 1,000 hectare field. If they tolerated waste -- they must provide reimbursement for the loss sustained.

Thus the problem of the master of the fallow fields is solved in this manner.

A reduction in the volume of spring operations, brought about by an expansion of the winter crops, has promoted a considerable improvement in the quality of these operations.

In almost all areas the sowing was carried out following good predecessor crop arrangements. The program aimed at sharply expanding the fallow fields must produce good results this year.

"But what is being done on those areas throughout the oblast on which the winter crops perished owing to a dry autumn season?"

"Grain crops have been planted on 200,000 hectares, 120,000 hectares are being used for grain corn and 80,000 hectares will be used for millet. In all, the plans call for corn to be sown for silage on 522,000 hectares and for grain on 200,000 hectares. The farms are pinning their hopes on an early sowing of sunflowers for feed purposes: 220,000 hectares have been set aside for this crop. The processing into sunflower cake will be late."

Over the past few days it has become warmer and healthy seedlings have appeared out on the sown fields in a timely manner. The winter crops appear to be good. The tractor brigades are applying a top dressing to the winter crops and the first waterings are being completed on feed tracts located in the zone of irrigation systems. Twenty thousand additional hectares of irrigated land have just been placed in operation. Alfalfa has been planted on them. Prior to the end of the year, the oblast's farms will be provided with 20,000 more hectares of irrigated land. On a certain portion of this land, they should be able to obtain 1-2 grass cuttings.

And the fact that the sowing of early grain crops in Volgograd Oblast was carried out in the same breath, made it possible to save both the soil and the plants from drying out early. The results are now dependent upon the skill displayed by the farmers. The growth of the forage crops must be intensified accurately in keeping with the watering schedules and the same result must be achieved under non-irrigation conditions through proper tending of the sowings.

During the year devoted to preparing for the 27th CPSU Congress, the Volgograd farmers have resolved to sell 3,450,000 tons of high quality grain to the state.

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MAJOR CROP PROGRESS AND WEATHER REPORTING

FEED PROCUREMENT MEASURES IN VOLGOGRAD OBLAST DISCUSSED

Moscow IZVESTIYA in Russian 21 Jun 85 p 2

/Article by A. Chemonin, Volgograd Oblast: "Value of a Haymaking Day"/

/Excerpts/ This year the farmers in the lower Volga region, especially farms on the left bank, are experiencing difficulties. Neither the winter snow nor the scanty spring showers were able to augment substantially the moisture supplies in the soil or to aid the grain and forage crops in resisting the dry winds which prevailed immediately following the extended period of cold weather during the month of May. The farmers are still awaiting the rain that is needed.

But the chief concern under the present situation is exactly how the personnel will work. Will use be made of all the available reserves and potential -- will the livestock breeders become confused over the feed situation and lose heart -- if so, then the situation will truly become difficult.

It should be stated immediately that the Volgograd workers are displaying character. The prolonged spring delayed the growth of the principal forage crop -- alfalfa. It was necessary to be patient and to wait until the time for the first cutting arrived. At the present time, while these lines are being written, the perennial grasses have already been harvested and the aftergrowth is proceeding rather rapidly in behalf of a second cutting. The rations for the animals on the farms have been supplemented using the summer feeds. The oblast's milk yields have increased by 300 grams daily per cow and the daily sale of milk to the state -- by 100 tons. Yes and the number of cattle, notwithstanding the difficult winter, has remained the same. A considerable amount of work remains to be carried out in connection with augmenting the herd. Nevertheless, the work that has already been carried out constitutes a worthy claim for success.

According to the specialists, an evaluation of today's status of affairs reveals that the Volgograd workers nevertheless possess the potential for obtaining 600,000 tons of hay and 1.7 million tons of straw. True, the straw requirement is 2 million tons. In order to cover the oblast's expected shortfall in straw, it will be necessary to plant secondary sowings on areas where grasses and winter crops have perished and to expand the areas for fodder roots and melon crops. Still a chief consideration is that of increasing the nutritional value of the feed by raising its quality. Taking into account the

additional measures, it has been estimated that it is possible to accumulate approximately 6 million tons of feed units during the season and this will be close to the annual requirement.

It is hoped that the personnel will perform well and display an interest in the final results. This would appear to be a copy-book truth and yet it needs repeating since the conditions vary in the different areas. Cost accounting principles are proving to be of great assistance in carrying out the perennial special purpose feed production programs in Gorodishchenskiy, Nikolayevskiy and Mikhaylovskiy rayons. However, they have been unable to interest the personnel in Yelanskiy Rayon. It is for this reason that the fodder beet plantations here have become overgrown with weeds.

Allow me to cite still another example. During every meeting held for the farmers, discussions have taken place on the need for introducing the Astrakhan technology, which ensures a perceptible increase in corn yields. However, again this year, the corn growers in Rudnyanskiy Rayon are not using this proven method on even one half of their sowings.

Moreover, in Volgograd Oblast there are large quantities of wild grasses, especially reeds, growing around reservoirs and low areas and on the floodlands of river valleys. In Podtelkovskiy, Zhirnovskiy and Kotovskiy rayons, after having mobilized the population and the collectives of supporting enterprises, they are mowing the unsuitable lands manually. But is full use being made of all available potential? Certainly not. Let us take these same flooded areas containing reeds. We still do not have a machine capable of cutting down reeds in water. It is believed that the local efficiency experts and inventors are fully capable of creating such a machine; the interested departments need only assign them the task. But obviously these departments do not consider this task worthy of attention. One might reasonably ask: the work of importing straw into the oblast from miles and miles away -- is this a worthy undertaking?

The goal of laying in an adequate supply of feed for the winter is a fully realistic one for the Volgograd workers. But they can cope with this task only if they follow the experience of leading farms and rely upon scientific-technical progress and take advantage of the mobilizing force of economic stimuli and the skill and expertise of production organizers, all collectives and each worker individually.

7026
CSO: 1824/507

MAJOR CROP PROGRESS AND WEATHER REPORTING

BRIEFS

GRAIN HARVEST COMMENCES--Volgograd Oblast--The busy harvest period has arrived on the fields in the lower Volga region. By tradition, the farms in the southern rayons are the first to commence harvesting their grain crops. The machine operators on farms in Svetloyarskiy, Oktyabrskiy and some other rayons have moved their units out onto the winter crop fields. /by V. Drobotov/ /Excerpts/ /Moscow SOVETSKAYA ROSSIYA in Russian 10 Jul 85 p 1/ 7026

GRAIN OF NEW HARVEST--Volgograd--Yesterday the grain growers in Gorodishchenskiy Rayon delivered ears of golden wheat to the Soldatskoye Field Memorial. According to tradition, it was here that the first red column had its start, the column which opened up the path to the country's granaries for the Volgograd grain. Machines carrying grain from the new harvest, from the fields of the Sovkhoz imeni Legendarnaya 62d Armiya, were greeted ceremoniously at the Volgograd Elevator. The grain growers in all of the southern rayons of the oblast, where the grain crops have already been cut down on the first 100,000 hectares, are carrying out their [illegible]in threshing work. /Text/ /Moscow TRUD in Russian 12 Jul 85 p 1/ 7026

ACCELERATED SCHEDULES--Volgograd, 29 Jul--More than 1,240 mechanized complexes and detachments are working out on the oblast's grain fields during this year's busy harvest period. A tense campaign is underway to accelerate the harvest schedules and to complete the work in just 9-12 days. A fine example is being set by the right flank competitions. Communist A. Panfilov, by obtaining 26-27 quintals of winter wheat per hectare, is fulfilling up to two norms at the Sebryakovskiy Sovkhoz. Excellent yields are being obtained by Yu. Betskov at the Znamya Oktyabrya Kolkhoz in Alekseyevskiy Rayon. The machine operators of the Volgo-Don Sovkhoz Association harvested their crop from a field of 5,000 hectares in just 4 days. /by A. Mochalov/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 30 Jul 85 p 1/ 7026

CEREMONIAL START--Volgograd, 12 Jul--The grain growers in Gorodishchenskiy Rayon delivered golden ears of wheat to Soldatskoye Field. The first red column carrying grain of the new harvest started out from this memorial, which was erected in honor of soldiers who fought here. It opened up the road for the Volgograd grain obtained during the year of the 40th anniversary of victory. The column was ceremoniously greeted at the Volgograd Elevator, where a high grade was assigned to the first grain. It was almost as though it had inherited the strength of character of the grain growers of the Sovkhoz imeni Legendarnaya 62d Armiya, which despite the winter cold, drought conditions and

intense heat, had grown golden wheat on the fields of the great military feat. And in order for the grain to be strong, all of the work was carried out in a high quality manner by the brigade of Yu. Zabaluyev, which operates on a contractual basis. Under complicated conditions, similar to all of the harvesting-transport complexes which have joined in the harvest work, the collective is continuing its difficult grain harvest work. Grain threshing operations have commenced in other southern rayons of the oblast, where the grain has been cut down on the first 100,000 hectares. /Text/ /Moscow SELSKAYA ZHIZN in Russian 13 Jul 85 p 1/ 7026

INTENSIVE TECHNOLOGY--Ulyanovsk, 28 Jan--On fields throughout the oblast, more extensive use is being made of the intensive technology for cultivating grain crops. During the autumn of last year, the kolkhozes and sovkhozes employed it for sowing 50,000 hectares of winter grain crops. In the spring the new technology will be used for planting 30,000 hectares of durum varieties of spring wheat, almost all of the sugar beet and grain corn sowings and one half of the sunflowers. The ridge method for growing potatoes, which last year enabled leading farms to obtain more than 300 quintals of tubers per hectare, has proven its worth. This year the plans call for the method to be employed for growing more than 70 percent of this valuable food crop. The successful mastering of progressive technologies is unthinkable in the absence of thorough personnel training and thus agrotechnical societies and seminars are in operation at all of the kolkhozes and sovkhozes at the present time. At the oblast school for the training of agricultural personnel, 400 leaders and specialists of oblast and rayon agricultural organs, kolkhozes and sovkhozes have completed a 48 hour program of instruction. A great amount of practical work is being carried out. First class seed for durum spring wheat has been selected for the cultivation of grain crops using the intensive technology and mineral fertilizers and pesticides are being placed in storage. /by M. Belousov/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 29 Jan 85 p 1/ 7026

AGRICULTURAL AVIATION--Ulyanovsk, 4 Apr--With the aid of aircraft from agricultural aviation, a top dressing must be applied this year to 150,000 hectares of winter crops. This is considerably more than in previous years. The chief indicators for evaluating the work carried out will be the quality and quality of the hectares of grain which were supplied with mineral fertilizers and not the number of flight hours, as was the case last season. Crews of aviators from Tajikistan are providing the Ulyanovsk workers with a great amount of assistance. In honor of the forthcoming 27th CPSU Congress, the aviators have resolved to process 25,000 hectares of grain crops over and above the plan. /by P. Grigorenko/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 5 Apr 85 p 1/ 7026

HARVEST OPERATIONS COMMENCE--Ulyanovsk, 18 Jul--The harvest work has started in the oblast's southern rayons. At the Simnitskiy Sovkhoz in Starokulatkinskiy Rayon, the harvesting-transport complex of Ya. Khayrov, using pulse crop harvesters, has cut down and placed in wind-rows the first 100 hectares of peas. Outstanding work was performed by combine operators R. Ibragimov and N. Sabitov, both of whom cut down 9 hectares of peas daily. The cutting down of peas is also being carried out by the Starokulatkinskiy Sovkhoz, the Yash Batyr and Rassvet kolkhozes and by a number of others. /by M. Belousov/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 19 Jul 85 p 1/ 7026

MASS HARVESTING OPERATIONS--Ulyanovsk, 25 Jul--Farms in the oblast's southern rayons have commenced the mass harvesting of peas -- the chief protein crop of the Volga fields. Commencing with the very first days, the mowing and threshing of the crops have been carried out in an organized manner at the Novozimnitskiy and Starokulatkinskiy sovkhozes and at the Rassvet and Za Mir kolkhozes in Starokulatkinskiy Rayon. Over a period of two and a half days, the grain growers at the Pamyat' Chapayeva Kolkhoz laid out the peas in wind-rows and commenced threshing it. There are 24 harvesting and transport complexes consisting of 150 specialized teams in operation out on the rayon's fields. The grain growers have assigned themselves the task of harvesting all of the pulse_crop areas, which exceed 6,000 hectares, in just 5-7 working days. /Text/ /Moscow SELSKAYA ZHIZN in Russian 26 Jul 85 p 1/ 7026

FALLOW PLOWING COMPLETED--Kiev, 10 Jun--The plowing up of bare fallow has been completed on farms in the Ukraine. More than 1.6 million hectares of land have been placed on a "rest" basis, thus allowing them to become more fertile. They have been thoroughly tilled and supplied with the required dosages of fertilizer. Compared to last year, such areas throughout the republic have increased this season by more than 150,000 hectares. They are accumulating moisture in a fine manner and favorable conditions have been created in them for improving the structure of the soil and for stimulating the activity of microorganisms. The return from clean fallow is especially high from the cultivation of strong and valuable varieties of wheat. The farms in Primorskiy Rayon in Zaporozhye Oblast serve as a reference point in this regard. The optimum amount of fallow land area has already been maintained here for one third of the five-year plan and it has accounted for 14-15 percent of the arable land in the crop rotation plans. As a result, nothing has prevented the local farmers from increasing their grain yield, under irrigation conditions, by 8 quintals per hectare. On the average, 40 quintal yields of select wheat have become_the annual norm here. /Text/ /Moscow SELSKAYA ZHIZN in Russian 11 Jun 85 p 1/ 7026

INITIAL TONS OF GRAIN--Kiev, 20 Jul--The collectives of grain receiving enterprises in the Ukraine are joined in a common rhythm as they carry out their harvest operations. They have accepted the initial tons of grain from the new harvest in Cherkassy and Chernovtsy oblasts, while farms in the southern zone of the republic have commenced the mass selling of grain. The state enterprises are capable of accepting hundreds of thousands of tons of grain_on a daily basis. /Text/ /Moscow SELSKAYA ZHIZN in Russian 21 Jul 85 p 1/ 7026

MASS GRAIN HARVEST COMMENCES--Kiev--The mass harvesting of the principal grain crop -- winter wheat -- began today in the Ukraine. Farmers in the northern and western zones launched this work along a broad front immediately following farms in the southern oblasts. Especially high requirements are being imposed upon the farmers this summer. The grain crops turned out to be of low height over considerable areas and in a number of places they lodged. Although the conditions are complicated, nevertheless the machine operators, who have been merged into 13,000 all-round detachments, are countering them with expertise and a high level of organizational ability. Grain lifters and units for tedding the wind-rows have been placed in operation. The workers on a number of southern farms have equipped the harvesters in a manner such that two units

can lay out one wind-row. This makes it possible to accelerate considerably the threshing of the cuttings. /Text/ /Vilnius SOVETSKAYA LITVA in Russian 18 Jul 85 p 1/ 7026

GUARANTEED YIELDS--The harvesting of cereal grain and pulse crops on the entire area of more than 4,000 hectares has been completed in an unprecedented brief period of time. But the chief consideration is the achievement realized this season by the farmers in Nisporenskiy Rayon -- exceptionally well coordinated operation of the harvesting complex. Equally high rates were achieved not only in the mowing and threshing work but also in the carrying out of all other operations. Here is a typical example. At the Zavety Ilicha Kolkhoz, on a field where wheat was harvested only recently, the seedlings of post-harvest corn are being watered. No pause has been allowed to develop between the various operations of the harvesting complex at the Biruintsa or imeni Zhdanov kolkhozes, at the Shishkany Sovkhoz-Plant or on other farms. And this certainly is of importance with regard to the future harvest. Having studied their potential in light of the recent decree of the CPSU Central Committee and the USSR Council of Ministers entitled "Measures for Increasing Grain Production From Winter Crops, Spring Wheat, Millet and Rice During 1986 Through the Introduction of Intensive Technologies for Cultivating Them," the workers in Nisporenskiy Rayon resolved to follow a program aimed at achieving guaranteed yields for their principal crops. In particular, the minimal yield for winter wheat was defined as being on the order of 40 quintals per hectare. This is 25 percent higher than the figure actually achieved and yet it is fully realistic for the conditions found in the rayon, provided full use is made of the potential offered by the intensive technology. For it is precisely this technology which will serve to guarantee such a yield. Of the areas made available, approximately 2,000 hectares will be used for this year's winter crops. The rayon's grain growers have assigned themselves a specific task: as rapidly as possible, to complete all operations associated with ensuring use of the intensive technology on this area. The soil, which has been well tilled and fertilized in conformity with the requirements for obtaining the planned yield, is "resting" until the commencement of sowing 1.5 months hence and it is also being supplied with moisture. Thus it will be capable of providing the guaranteed yield regardless of the caprices of nature. These tasks are being carried out successfully notwithstanding the fact that rather complicated conditions prevail throughout the rayon. Indeed the fields are small, scattered and located for the most part on steep slopes. Nevertheless, aware that they have undertaken a worthy and necessary endeavor, one which is in keeping with the party's program for introducing scientific-technical progress into all branches of the national economy, the grain growers are carrying out their work in an enthusiastic manner. /Text/ [Kishinev SOVETSKAYA MOLDAVIYA in Russian 31 Jul 85 p 1/ 7026

GRAIN HARVEST STATUS REPORT--By 29 July of this year, according to data supplied by the CSA for the Moldavian SSR, winter and apring grain crops and pulse crops (less corn) had been cut down on 94 percent of the area, 27 percent more than by this same date last year, with 93 percent of the grain from the harvested area being threshed (26 percent more). The mowing and threshing of winter wheat is nearing completion. Compared to last year, secondary sowings have been carried out on a somewhat larger area and the rates for autumn plowing are higher. As of yesterday, in addition to Dubossarskiy Rayon, harvest operations

were completed also in Lazovskiy and Floreshtskiy rayons. The work of harvesting detachments in such rayons as Komratskiy, Teleneshtskiy and Kantemirskiy was skilfully organized, with not the slightest pause being tolerated between the mowing and threshing operations. The harvesting rates in such northern rayons as Drokiyevskiy, Ryshkanskiy and Brichanskiy were raised considerably, which cannot be said for their neighboring Dondyushanskiy Rayon, where the grain was cut down on only 82 percent of the areas, Yedinetskiy Rayon (85 percent) and Oknitskiy Rayon (also 85 percent). The harvest work in Kalarashskiy and Strashenskiy rayons has fallen seriously behind. In Chernenkovskiy, Kamenskiy and Sorokskiy rayons, 15-20 percent of the grain crop is still lying in wind-rows. Once the grain harvest work has been completed, the crop residues must be removed from the fields without delay, the soil must be prepared for the harvest of the first year of the new five-year plan and special attention must be given to the quality of the work being carried out. /Text/ /Kishinev SOVETSKAYA MOLDAVIYA in Russian 1 Aug 85 p 1/ 7026

HIGH QUALITY GRAIN--Odessa, 31 Jul--Grain deliveries to the state granaries are continuing. Each day, farms throughout the oblast sell 40,000 tons. Importance is being attached to the fact that 70 percent of the wheat being sold is from strong and valuable varieties. As a rule, it was grown using an intensive technology. At the Druzhba Kolkhoz in Savranskiy Rayon, this method was used for growing corn on 230 hectares and a yield of 50 quintals per hectare was obtained. And all of it was of the highest quality. /by A. Soldatskiy/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 1 Aug 85 p 1/ 7026

WHEAT HARVEST COMPLETED--Odessa, 5 Aug--Collaboration between the farmers in Kiliyskiy Rayon and their partners in the agricultural industry produced fine results. The wheat harvest has been completed here. An average of 30 quintals of grain was obtained from each hectare and on many farms -- up to 50. Here credit is due to all those who combined their efforts with the grain growers -- the land reclamation specialists, agrochemists and repair workers of rayselkhoztekhnika. /Text/ /Moscow SELSKAYA ZHIZN in Russian 6 Aug 85 p 1/ 7026

GRAIN STORAGE EQUIPMENT--Kharkov, 13 Jul--The grain crops are still ripening out on the fields and the procurement specialists are calling for the necessary conditions to be created for storage of the grain. Eleven new and powerful motor vehicle loaders for motor vehicle trains have been placed in operation at the oblast's elevators. There are now more grain dryers and they are making it possible to increase, by roughly 20 percent compared to last year, the daily drying of grain of a raised moisture content. New equipment has also been delivered for one of the largest elevators in the oblast -- Gutyanskiy and the Novovodolazhskiy Grain Base. At the present time, there are more than 80,000 hectares of winter crops, which according to preliminary estimates will be used for strong and valuable wheat. The grain receiving points have acquired 44 special automatic units for the purpose of determining, in a better and more rapid manner, the gluten content in the wheat. /by N. Demikhovskiy/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 14 Jul 85 p 1/ 7026

GRAIN HARVEST PROBLEMS--Kharkov Oblast--Bogodukhovskiy Rayon is one of the best grain producing areas in Kharkov Oblast. But in recent years, not all of the farms have succeeded in obtaining good yields. The specialists have examined

thoroughly the technological chain and they have uncovered certain areas of neglect. They corrected some of the problems and they tightened up labor discipline in all of the subunits. Their efforts were rewarded by a generous return. This year the rayon has a fine crop of both winter and spring grains, especially on areas cultivated using the intensive technology. At the same time, the busy harvest period caught some by surprise. The grain growers in Kegichevskiy Rayon were clearly slow getting started. Several fine days were lost while they procrastinated. Nor was the work organized properly on a number of farms in Krasnokutskiy, Borovskiy and Sakhnovshchinskiy rayons. City patrons are providing the oblast's farmers with a great amount of assistance. From Kharkov alone, more than 1,000 combine operators and drivers with heavy trucks went out to provide assistance in carrying out the harvest work. Nor was their assistance utilized in a skilful manner in all areas. "We were not expecting this to happen" stated A. Byshko, the dispatcher for Motor Vehicle Column No. 2226, "The dormitory was not ready and we had to spend the nights in our machines." This group of drivers was sent out on temporary duty from Kharkov to the Dvurechanskiy grain receiving point. In addition to domestic inconveniences, the personnel also encountered other obstacles. As trucks loaded with grain approached the unloading lines, they were dispatched over a distance of 2 kilometers to be weighed, since no scales were available in the unloading area. Although this was mentioned in the documents of the oblast's grain products administration, nevertheless the acceptance point at Dvurechna was accepted with a grade of "good." If you please, there is perhaps nobody who is more qualified than the machine operators to understand the importance of the truth that each hour is valued highly during the harvest period. Thus all of the requirements, indeed even the most rigid ones, must be considered all of the requirements, indeed even the most rigid ones, must be considered fair. Indeed, the goal is a high one -- to supply the state with as much grain as possible. /by I. Lakhno/ /Text/ /Moscow PRAVDA in Russian 28 Jul 85 p 1/ 7026

FIELD FERTILIZATION--Cherkassy, 3 Jul--The oblast's farmers are striving to move as much organic fertilizer out onto the fields prior to the commencement of the harvest and to create a reliable supply of such fertilizer for applying to the soil in behalf of next year's harvest. The farms in Gorodishchenskiy Rayon have fulfilled by 75 percent their annual plan for hauling organic fertilizer. The kolkhozes and sovkhozes in Drabovskiy and Zolotonoshskiy rayons have supplied the fields with more than 7 tons of each 10 tons planned. /Text/ /Moscow SELSKAYA ZHIZN in Russian 4 Jul 85 p 1/ 7026

FAMILY CREWS--Cherkassy, 26 Jul--The harvesting of early grain crops is in full swing on farms throughout the oblast. Just as in past years, many family crews are participating in the harvest work. /by S. Luzgan/ /Text/ /Moscow SELSKAYA ZHIZN in Russian 27 Jul 85 p 1] 7026

CSO: 1824/510

LIVESTOCK FEED PROCUREMENT

RSFSR FEED PROCUREMENT OVERVIEW, CENTRAL CHERNOZEM REGION

Moscow SELSKAYA ZHIZN in Russian 19 Jul 85 p 1

/Article by M. Glinka, zootechnician: "Feed Procurement -- A Common Concern"/

/Text/ The USSR Central Statistical Administration has reported that by 15 July the country's kolkhozes and sovkhozes had laid away coarse and succulent feed, the overall nutritional value of which is 28.5 million tons of feed units. Their procurement plan has been fulfilled by 21 percent.

The agricultural workers in the Central Chernozem region are solving great and complicated tasks. One of the principal ones is that of ensuring nourishing wintering conditions for the livestock. For example, the farms in Kursk Oblast have undertaken to lay away approximately 19 quintals of coarse and succulent feed units per standard head of cattle and the Belgorod farmers -- up to 24 quintals. Here the kolkhozes and sovkhozes are striving to lay away not less than 1 ton of hay per cow. The obligation of the procurement specialists in Lipetsk Oblast -- 2 tons.

High obligations have also been undertaken by workers in other oblasts throughout the region. Are they holding to their promise? The following figures were provided by the RSFSR TsSU /Central Statistical Administration/ (in percentages of the plan).

Oblasts	Grass Cut Down	Procured	
		Hay	Haylage
Belgorod	59	30	29
Voronezh	70	45	19
Kursk	59	22	70
Lipetsk	62	23	56
Tambov	53	27	26

The highest rates in cutting down the natural and sown grasses are being achieved by the farms in Voronezh and Lipetsk oblasts. In Voronezh Oblast (chairman of the agricultural industry is I.A. Vinogradov), the first cutting of sown perennial grasses has practically been completed. And although the spring dry period and the rainfall did not bypass the oblast, nevertheless the farmers here succeeded in laying away 227,000 tons of hay -- more than one half

ton for each cow, the herd of which is the largest in the region. In Lipetsk Oblast (chairman of the agricultural industry is F.T. Sukhanov), the first cutting of perennial grasses is nearing completion. But important operations were carried out in these oblasts considerably later than the best periods and the feed procurement rates on Voronezh farms have even declined. During the week under review, the supplies of such procurements increased by only 1 percent.

In the case of Tambov Oblast, the most backward one in the region (chairman of the agricultural industry is N.I. Kostin), here the first cutting of grasses has still not been carried out on 95,000 hectares, or almost one half of the overall area. The chief reason -- failure to employ leading feed procurement methods, with a preference being shown for old and obsolete methods. As noted during a recent meeting of the aktiv of the oblast party organization, sluggish thought and indifference are making their presence known. Forced ventilation and pick-up balers are being employed in a weak manner in a number of rayons and vitamin meal units are being used unproductively. As a result, both the rates for procuring grass feed and the quality of this feed are declining. Thus, of the hay inspected prior to the beginning of July, 28 percent turned out to be 3d grade of sub-standard and in the case of grass meal -- 53 percent.

Quality is one of the most vulnerable items on many farms. In Belgorod Oblast, it would seem at first glance that the work is proceeding well -- 95 percent of the hay inspected was classified as being of 1st or 2d grade. But indeed only one third of the feed procured was inspected and in a number of rayons no controls were exercised over the feed quality. In some instances, the value of the forage declines as a result of a poorly selected technology. In Kursk Oblast the decision was made to store hay even during inclement weather -- to salt the damp grasses so as to prevent them from rotting, to combine them with layers of straw and generally to prepare a so-called brown hay -- feed which although edible is not very nutritious. Thus it came as no surprise to learn that more than one third of the hay inspected on a number of farms was classified as being of 3d grade or sub-standard. During rainy weather, chemical treatment constitutes the best method for preserving grasses. Hundreds of tons of preservatives were brought into the oblast, an amount sufficient for protecting 100,000 tons of fodder from spoiling. But by no means have all of the local farms obtained the required chemicals.

There is no denying the fact that nature this year has hampered seriously the feed procurement operations. Thus it is even more important to make use of all available means and opportunities for ensuring good wintering conditions for the livestock. Workers attached to industrial enterprises, of which there are many throughout the region, can furnish a great amount of assistance in this regard. And in many areas they have actively joined in the feed procurement operations. In a number of rayons in Belgorod Oblast, the city-dwellers actually went out onto the meadows earlier than the rural residents.

It goes without saying that feed procurement work is a national endeavor. In aiding the agricultural workers in providing good wintering conditions for the kolkhoz and sovkhoz herds, the residents of cities and industrial centers are at the same time improving the satisfaction of their own requirements for milk, meat and other farm products. But it often happens that the "organization" of work by city-dwellers out on the meadows becomes a matter of issuing a simple

order for work: here is a task for you for procuring a certain amount of feed and would you please be kind and carry it out. Such an approach hardly arouses either labor enthusiasm or creative endeavor. And in any case it did not guarantee a zealous attitude towards the feed or strict observance of the feed procurement technology, in the absence of which it is impossible to obtain good forage. This is why the example set in Lipetsk Oblast, where conditions were developed in advance for a competition among the municipal collectives and funds were allocated for paying bonuses to the winners, is deserving of support.

Nevertheless, the workers attached to industrial enterprises could have participated more actively in the feed procurement work and provided considerably more assistance. It consisted not of chopping down more branches, a considerable portion of which would later end up in a bonfire, but rather of making the procurement of ramal meal unnecessary. Collectives in the city of Kursk resolved this year to procure fodder for public livestock husbandry at the rate of one and a half tons per worker. This was a fine initiative! But it would have been considerably better if these collectives had joined together to build, for example, silage and haylage storehouses, the requirement for which, for farms throughout the oblast, has been satisfied by only 50 percent. Workers attached to the Tambov Oblast Station for the Use of Chemical Processes in Livestock Husbandry placed two units in operation in Kirsanovskiy Rayon for the processing of hay using anhydrous ammonia and thus the problem of preserving excessively damp feed at a number of kolkhozes was solved. What is preventing the subunits of Selkhozkhimiya from doing the same? Skilled craftsmen from the Ore Administration of the Stoylenskiy Mining-Enrichment Combine in Belgorod Oblast made a mowing machine and a toothless harrow for a sovkhoz which accelerated the work out on the meadows noticeably. This was a fine example for other collectives which are capable of mechanizing their feed procurement operations. And is the problem of building hay barns out of slate similar to those built at the Uvarovskiy Sovkhoz really unsolvable for the industrial enterprises of Tambov? It is easy to find such examples in any oblast. The mechanization of laborious feed procurement operations, the introduction of scientific-technical achievements into feed production work and strengthening the branch's logistical base -- these are sectors in which the patrons can carry out a great amount of work this year.

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LIVESTOCK FEED PROCUREMENT

FEED HARVEST PROGRESS, PROBLEMS REVIEWED

PM170830 Moscow SELSKAYA ZHIZN in Russian 13 Sep 85 p 1

[Animal Technician M. Glinka "Agricultural Revie ': "The Stock Unit's Strength Lies in the Feed"]

[Text] As of 9 September, procurements amounted to 70 million metric tons of hay, 73 million metric tons of haylage, and about 67 million metric tons of straw, chaff, and other threshing-floor feed; 111 million metric tons of silage and 6 million metric tons of artificially dehydrated green feeds had been produced.

Feed procurement is perhaps the most time-consuming field work in the countryside. While soil preparation, sowing, field cultivation, and harvesting can be measured in days or weeks, the accumulation of feed requires many months of strenuous work. "Don't leave the field or meadow before the daily norm is fulfilled"--this is the work slogan of machine operators in grain harvesting today. "Don't leave the field or meadow until everything that has been grown has been harvested"--this is the slogan of front-ranking feed producers.

Much still remains to be gathered. There still remain natural and sown grasses, silage crops, and root and tuber crops. The fall fields yield various waste from industrial, vegetable, and food crops--good raw material to supplement the reserves of silage, vitamin meal, and coarse feeds. How are these sources of nutrients utilized? Here is the answer suppled by USSR Central Statistical Administration data (in quintals of feed units per head of livestock):

	Procured In Total	Procured In Week Under Review
RSFSR	11.31	1.04
Ukraine	10.00	1.17
Belorussia	12.13	0.65
Uzbekistan	11.16	0.64
Kazakhstan	9.98	1.30
Georgia	9.45	0.57

[Chart Continues on Following Page]

	Procured In Total	Procured In Week Under Review
Azerbaijan	13.43	0.29
Lithuania	14.90	0.49
Moldavia	9.22	0.35
Latvia	12.13	0.54
Kirghizia	10.85	0.92
Tajikistan	10.58	0.35
Armenia	11.84	0.54
Turkmenia	11.26	0.78
Estonia	11.58	1.01

What is striking is the unpleasant fact that the feed procurement pace has slowed down markedly in many regions. For example, during the week under review Belorussia's farms increased their reserves (per head of livestock) by only 65 feed units, while the quantity laid in in the previous 7 days exceeded 1 quintal. Daily feed procurement volumes have fallen in all oblasts except Gomel. If work in the feed fields today were progressing as fast as 2 weeks ago, the republic would have already fulfilled the plan for succulent and coarse feed procurement. Meanwhile dozens of haylage towers are standing empty, and numerous silage trenches are still to be filled.

Among the Baltic republics, only Estonia has maintained the due pace in feed procurement: In the last few days this republic's crop farmers have even stepped up their pace of work. Its neighbors' feed yards contain less feed than at this time last year, and many reserves still remain unutilized. For example, Latvian farms have fulfilled only 79 percent, and Lithuanian farms only 74 percent, of the plan for laying in silage.

In central Asia, Turkmenia's kolkhozes and sovkhozes are continuing to supplement their feed reserves at a fast pace, and indeed they are closest of all to the fulfillment of their plans. Nor have Kirghizia's feed producers slackened their efforts. During the last week in August and the first week in September they laid in more feed than in any corresponding period since the start of procurement. Many of the mountain republic's rayons have already laid in sufficient coarse feeds, while Kalininskiy, Keminskiy, Moskovskiy rayons have also laid in sufficient succulent feeds, to meet their annual requirements, and they are continuing to build up their reserves. Osh oblast's farms--initiators of the competition to lay in 18-months' feed reserves--have pledged to perform at least 5 mowings of perennial grasses and produce 100 quintals per hectare, while crop farmers from Leninskiy, Bazar-Kurganskiy, Aravonskiy, and Ala-Bukinskiy rayons have pledged to produce 130 quintals per hectare. And this complex task is being successfully resolved.

A different state of affairs prevails on farms in Uzbekistan and Tajikistan, where the already slow pace of increase in feed reserves was reduced even further during the week under review. And yet they have laid in only 65 and 74 percent respectively of the planned hay quantity, and 48 and 49 percent respectively of silage. This lag is intolerable!

The pace of feed procurement in the Transcaucasus is slowing down in all three republics. A particularly alarming situation has developed on Georgia's farms, which have fulfilled their coarse and succulent feed procurement plans only 63 percent, and their silage plans only 36 percent. Only 38 percent of the planned volume of this feed has been produced in Azerbaijan, and only 48 percent in Armenia.

The situation is far from uniform in the feed yards of RSFSR kolkhozes and sovkhozes. Nor is this surprising in view of its vast territory. But the point is not just weather or climatic differences. Farms in one and the same zone, working under similar conditions, often produce totally different results. In the central region, for example, Kaluga oblast's kolkhozes and sovkhozes have already overfulfilled the plans for laying in coarse and succulent feeds, and Vladimir, Kostroma, and Yaroslavl oblasts are not far behind, but Moscow oblast has met this target only 71 percent. So it is all the more puzzling that the work pace in the feed fields there has slackened and the Moscow region's pace is one of the slowest.

We will list those who, during the week under review, achieved the highest growth in building up reserves of coarse and succulent feeds in their regions (the figure in parantheses indicates the quantity of feed laid in during the 7-day period in terms of quintals of feed units per standard head). In the northern region--the Karelian ASSR (0.7); northwest region--Leningrad oblast (0.7); central region--Orel oblast (1.1); Volga-Vyatka region--the Chuvash ASSR (1.6); central Chernozem region--Belgorod oblast (2.7); Volga region--Ulyanovsk oblast (2); northern Caucasus--Krasnodar kray (2); Urals region--the Bashkir ASSR (1.9); West Siberia--Altay kray (1.3); East Siberia--Chita oblast (1.3); and in the far east region--Khabarovsk kray (2.7). And here is a list of those occupying last places: Pskov oblast (0.3), Kalmyk ASSR (0.3), Dagestan ASSR (0.3), Chelyabinsk oblast (0.4), Kemerovo and Novosibirsk oblasts (0.1), and Krasnoyarsk kray (0.4).

The pace of feed procurement is picking up on farms in the Ukraine and Kazakhstan. In the Ukraine this work is being performed particularly fast in Volyn, Voroshilovgrad, Zhitomir, Kirovograd, Rovno, Cherkassy, and Chernigov oblasts. Crop farmers in Dnepropetrovsk, Donetsk, and Kharkov oblasts are lagging behind. Above-plan procurement of hay and haylage in Kazakhstan has been registered by kolkhozes and sovkhozes in Kustanay, North Kazakhstan, Mangyshlak, and Tselinograd oblasts. The smallest quantity of feed per standard head of livestock has been procured in Guryev, Kzyl-Orda, and Mangyshlak oblasts.

An alarming situation has developed on Moldavia's farms, where only 9.22 quintals of feed units of coarse and succulent feeds per standard head have been laid in--just 44 percent of the planned quantity.

The need to resolutely introduce intensive methods of production in stock raising and enhance the productivity of all types of livestock was emphasized yet again at the recent Tselinograd conference of the party-economic Aktiv. In order to accomplish this task it is necessary to increase in every way the reserves of full-value feeds.

CSO: 1824/4

LIVESTOCK FEED PROCUREMENT

SEMINAR PARTICIPANTS DISCUSS FEED PRODUCTION INTENSIFICATION

Moscow EKONOMICHESKAYA GAZETA in Russian No 32, Aug 85 p 16

[Article by M. Ulyanov: "Intensified Technology for Feed Production"]

[Text] Recently an all-union seminar-conference took place in the Tatar ASSR city of Brezhnev at which participants discussed the problems of industrial technology used in the production, preparation and storage of fodder and the tasks involved in getting ready for the impending wintering of cattle. The conference was opened by the chairman of the USSR State Committee for Supply of Production Equipment to Agriculture, L. I. Khitrun. Basic reports were presented by the deputy USSR Minister of Agriculture, A. T. Gulenko, and the deputy chairman of the USSR State Committee for Supply of Production Equipment to Agriculture, V. I. Dubovik.

At the seminar, it was noted that, in this concluding year of the five-year plan, the country's kolkhozes and sovkhozes must supply 145 million tons of feed units of all types of feed. This is seven million tons more than last year. This is not an easy task when one considers that forage preparation is being carried out under unfavorable weather conditions in a majority of the country's rayons. In order to successfully cope with the established task, conference participants stated that it is necessary to counter the poor weather with a high degree of organization in the work of all farm laborers, and to carry out the harvest everywhere using the efforts of specialized work detachments, brigades and teams. Special attention was given to the introduction of new and highly efficient technology to be used in the procurement, preparation and storage of feed.

In the Belorussian SSR, the Tatar ASSR and in a number of other regions, the grass harvest, noted V. I. Dubovik, is being done by harvesting and transportation work detachments of the rayon associations for supply of production equipment to agriculture. This allows for the efficient utilization of machinery and optimum manipulation of labor resources. Fodder storage here is being accomplished in cured hay tower silos in which cured hay preservation is 15-19 percent higher than in trenches. The experience of the foremost farms indicates the high efficiency of these structures in the Baltic, Belorussia, the Ukraine and in the Central Black Earth region of the RSFSR and in other areas.

For example, the feeding complex of the Sovkhoz-Combine "Mir" in Brestskiy Rayon has been using tower silos for more than 10 years. The silos ready about

40,000 tons of high quality cured hay with a feed capacity for each kilogram of not less than .35 feed units. Cattle fattening with fodder on these farms amounts to more than a kilogram daily. Good results are being obtained on the dairy complexes of "Komsomolets" in Sakhalin Oblast, which has 24 tower silos; at "Lensovetovskiy" in Leningrad Oblast; at "Gigant" in the Tatar ASSR; at the Sovkhoz "Pogranichnik" feed complexes in Moldavia; at "Chapayevskiy" in Zaporozhye Oblast and at many other farms in the country. These, and many other kolkhozes and sovkhozes, have introduced the brigade form in their organization of labor for the procurement of hay silage. The work is being done by a unified work detail which receives its wages dependent on the quality and quantity of the feed. But, as stated at the conference, such is far from the case everywhere.

In a number of union republics and RSFSR oblasts, major losses in feed storage are tolerated in poorly maintained facilities. Feed procurement has not begun in a timely manner everywhere. And so, in Kazakhstan, Turkmeniya, the Kalmyk ASSR, and the Pskov, Yaroslav and other oblasts, at the start of hay mowing up to 30 percent of the primary feed harvesting machinery was not ready. For this reason many farms delayed the beginning of harvesting of hay in Vladimir, Kalinin, Ryazan, Smolensk, Kursk, Tambov and other oblasts.

Conference participants spoke anxiously about being behind in preparations for cattle accomodations and fodder for winter and repair and replacement delays for unfit equipment on farms and animal husbandry complexes. Measures to eliminate deficiencies in the preparatory period were outlined.

8504
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LIVESTOCK FEED PROCUREMENT

UKSSR SEMINAR REVIEWS FEED PRODUCTION

Kiev SILSKI VISTI in Ukrainian 31 May 85 p 2

/Article by H. Senkevich, SILSKI VISTI special correspondent: "The Procurement of High Quality Feeds for the Next Year and a Half: Notes from Ukrainian Livestock Feed Seminar-Conference"/

/Text/ Among the many tasks on the agenda of the current Food Program, at present the most pressing is the intensification of collectively raised livestock. Although the production of milk, meat and other farm products is steadily growing from year to year on the republic's farms, the rates of increase are as yet insufficient. Meanwhile, specialists are convinced that the genetic potential present in livestock of kolkhozes, sovkhozes and other agricultural enterprises is such that, let's say, a 3,000 kilogram milk yield per cow, which for many these days is all they can realistically hope for, could have long ago become the annual standard for each farm. It could have become the standard, but did not. The reason: A poor feed base and thus deficient nourishment of livestock. Quite a few other livestock products are not being obtained in acceptable quantities for the same reason.

In the past few years much has been done to increase fodder supplies and to improve their quality. By comparison with the previous Five-Year Plan, the average annual production of feeds has increased 6 percent during the present Five-Year Plan and the production of nutritive protein in the feeds has increased by 8 percent. A further increase may be seen in the number of farms on which an average of 80 to 100 quintals of feed units are harvested annually from a sown feed wedge. Quite a few of these farms are in Vinnitsa, Kirvograd, Ternopol and Cherkassy oblasts, as well as a number of others.

The gross yields for sown and natural crops, however, still do not fulfill feed requirements for intensive development in the branch of collectively raised livestock, and these crops' nutritiousness, although high, remains insufficient. For instance, farms of the republic did not manage last year to meet the planned procurement of any sort of coarse and succulent feeds. This compels workers in the agroindustrial complex to resolutely review the state of affairs in feed production and to employ urgent measures to overcome this shortfall.

A vital and most interesting discussion occurred with the introduction of this subject at the republic seminar-conference on feed production problems, which was conducted recently by the UkSSR Minsil'gosp on the basis of work done by the Ukrainian scientific research institute of crop farming. Deputy managers of oblast agricultural administrations for feed production, a number of rayon agricultural administration managers, farm specialists, and scientists were asked to participate in the seminar-conference. In a report to the participants by O. M. Tkachenko, UkSSR minister of agriculture, and in other speeches presented at the seminar-conference, there was sensed an uneasiness with the state of affairs in the branch, and a strong desire to get the branch on the track of intensive development within the limited amount of time available. Opportunities for this are everywhere.

One of the urgent tasks for feed production workers, which was stressed at the seminar-conference, is the improvement in the arrangement of those areas sown with fodder in which space should be set aside for perennials and especially for leguminous grasses. In the next few years the specific density of these crops in the sown feed wedge must reach 50 percent in the Steppe and Forest Steppe and 60 percent in Woodlands. However, the portion of areas sown for perennials in feed wedges has reached a level of only 24 to 33 percent, for instance, in farms of the Crimean, Nikolayev, Voroshilovgrad and Zaporozhye oblasts. The percentage of these areas is similar in farms of Sumy, Kharkov, Khmelnitskiy and Chernigov oblasts. Meanwhile, calculations show that if the specific density of perennial grasses in the arrangement of fodder-sown areas were close to optimum, it would be possible to obtain almost a million additional tons of high-quality hay every year. There is no reason for the low yield of these crops on many farms. As in the last few years, the yield is just not increasing in Zhitomir, Lvov and Odessa oblasts. A significant addition to the harvest can be had by increasing the area sown with high-albumen crops, such as alfalfa and white sweet clover, and by the introduction of leguminous cereal feed mixtures. Unfortunately, there has been no focus on the experience of top workers in approaching these questions. The task of specialists of the oblast and rayon agroindustrial associations therefore is to try to obtain, as far as is possible and in every possible way, a more significant expansion in advanced work methods and in prospective technologies for the cultivation of fodder crops.

Areas sown with MANGEL require great attention. Farms of the republic have every chance of obtaining 500 to 600 quintals of mangel per hectare of sown land on dry farming land, and on irrigated land that figure can be more than two times greater. However, the procurement of this crop has been insufficient in the last few years. And it is all the more insufficient because the little bit of this crop planted in areas sown for feed for the most part does not exceed 3 to 5 percent of those areas, but the yielding capacity is 220 quintals. Consequently, it was emphasized at the seminar-conference that efforts must be made so that mangel occupies its rightful place everywhere in fields sown for fodder and so that it is cultivated only by technological means reserved for such sugar beet crops.

The improvement of the technology for cultivation and procurement of green mass corn, which occupies a third of areas sown for feed, has great significance for the strengthening of the feed base. As yet this crop's possibilities have not been sufficiently realized. Its yield is still very low, and many fields are still occupied by late-ripening hybrids, resulting in a significant shortage of green mass in a number of oblasts. Consequently, nature urgently demands a broader utilization of early and mid-early ripening corn hybrids before others on fields of feed crops, so that there is an opportunity to collect the harvest during the stage of the masses' maximum nutritiousness, and so that the area is freed significantly earlier for the next crop, which is very important.

To guarantee the annual productivity of a milk-giving herd on a level of 3,000 to 3,500 kilograms, in addition to the production of a sufficient quantity of fodder from the previously mentioned crops, the proper ORGANIZATION OF GREEN CONVEYER during the pasturage period--when almost two-thirds of the meat and milk is produced--has great significance. Nevertheless, it is not everywhere planned seriously. Poor planning still occurs on farms of the so-called "Vikno" /window/, causing periods when the livestock are fed only one type of leguminous or cereal grass. Seminar participants had the opportunity to be convinced first-hand of the great possibilities of a well-put-together green conveyer at a demonstration on a parcel of land belonging to the Ukrainian scientific research institute of crop farming, where a wide range of various crops was exhibited. The use of these crops provides an opportunity to feed livestock green mass from 15 April to 1 December--a total of 230 days. The concern, however, is to obtain, as much as possible, the permanent establishment of a wider range of these crops on the fields of Kolkhozes and Sovkhozes.

In a number of oblasts there is poor utilization of IRRIGATION OF CROP AREAS to increase production of feeds. For instance, in Zaporozhye Oblast fodder crops occupy less than 40 percent of the irrigated fields. Thus, this land remains low in productivity.

The care of NATURAL-ARABLE FEED CROP LANDS should be duly improved. As yet an average of not more than 18 quintals of hay is harvested from such lands, and in some oblasts the figure is even lower. More feeds should be obtained from cultivated pastures and reclaimed lands.

Much attention at the seminar-conference was given to SEED PRODUCTION and PLANT BREEDING WORK. The seminar participants visited plant breeders of the Kiev scientific research station for the cultivation of meadows.

At the seminar-conference it was emphasized that it is necessary, insofar as is possible, to more quickly bring to bear all available reserves at each farm in order to constantly maintain the ability to stock up a year and a half's supply of coarse and succulent feeds for the collective herd, just as the agricultural workers of the Rovno Oblast planned to do this year.

M. F. Mezentzev, deputy manager of the CPUk Central Committee's Department of Agriculture and Food Industry spoke at the seminar-conference.

12911
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LIVESTOCK

REGULATION OF CHICK INCUBATION BY ELECTRONIC SIGNAL

Moscow TEKHNIKA I NAUKA in Russian No 7, Jul 85 pp 26-27

/Article by A. Maystrovoy, engineer, Kursk - Moscow: "An Electronic Brood-Hen"/

/Text/ A brood-hen, while scattering a dust-heap, cackles and thus summons its chicks. Thereafter, a dozen yellow balls chirp and rush to the promised food. "Danger!" -- a warning signal sounds and immediately the furry balls come quickly to attention. The commands of the mother are carried out efficiently, since any disobedience is dangerous and sooner or later ends in the death of the young chick -- nature does not tolerate an argument between "parents and children."

Even before leaving its egg, a young chick has already been drawn up in the regime of chicken life. And after hatching, all information -- when to eat and sleep, how many meters to move away from the brood in search of food and what place to occupy among the other chicks -- is obtained from the mother. And the vitality and adaptability towards the surrounding world of a young chick are dependent upon how well it masters the lessons taught by the brood-hen.

It would appear that an incubator creates maximum favorable living conditions for hundreds of thousands of young chicks. They have an unlimited supply of food, they provide protection against rainfall and cold weather and they are not threatened by cats, kites or polecats. Nevertheless their mortality rate is high and the maturing chicks are weaker and smaller than their contemporaries which lead a free life.

What is the reason for this? It turns out that for absolute comfort at a poultry factory the poultry lack a signalization system -- a set of sounds and reference points which regulate their behavior. The genetic fund embodied in a young chick is active up until a definite moment and thereafter, under natural conditions, the function of controlling the fledgeling is transferred over to the brood-hen. In incubators, the "homeless infancy engenders chaos and uncoordinated actions in the young stock. The brood period, which lasts 2-3 hours, is somewhat longer at a poultry factory. Chicks which hatch too early leave brooders after a prolonged stay in a sickly state. And those which emerged from their eggs late risk being trampled upon by their more energetic brothers. In the tight brooder trays, infections can break out easily and spread rapidly causing harm to hundreds of as yet weak chicks. As a result,

the hatching percentage declines sharply. The average number of chicks lost during the initial hours following hatching reaches 20 or more percent of the overall brood.

Under natural conditions, the strict hierarchy established in a chicken family does not allow the more weak poultry to be "perpetually victimized." The brood hen monitors the situation to ensure that the feed is distributed more or less uniformly. Later, although the maturing chicks are often forced to yield to their more impudent brothers when taking food, the large living zone enables them to act independently of the will of their neighbor. They can try their luck in another area and forget the offender.

The incubators lack the vigilant eye of the mother, who controls the behavior of its young. A true reign of "terror" arises among poultry concentrated in cages. Those which are less alert or clever live in constant fear of the leader and their rate of growth, health and weight are adversely affected by a constant state of stress.

The problem of "culture of feeding" exists at poultry factories, while it is non-existent under natural conditions. Upon being placed in a raising department and not hearing the calm summons by the brood hen calling upon them to eat, the chicks cause disorder and a general melee at the feeding trough, they scatter the grain, push one another against the trays and trample upon and cripple those which fall to the ground. Under such conditions, it is useless to even discuss the normal assimilation of food.

There is only one method for lowering the losses in young stock and regulating their lives -- to introduce a rhythm for their natural life into the confusion of poultry existence and to return the chicks to their strict and concerned brood-hen.

This idea found expression at the Signal Biotechnical Complex, created by A. Tikhonov (Institute of Evolutionary Morphology and Ecology of Animals imeni A.N. Severtsov) and V. Gutsevyy (Ornithology Laboratory of Moscow State University imeni M.V. Lomonosov). Consisting of several units, this complex reproduces the commands of a hen and controls the behavior of chicks throughout their entire life at a poultry factory.

"Sinkhrotemp" and "Broyler"

The "Signal" biocomplex includes three devices -- "Sinkhrotemp," "Broyler" and "Diapazon."

The use of "Sinkhrotemp" makes it possible to solve two tasks simultaneously -- to raise the hatching rate for chicks, by synchronizing their emergence, and to reduce the incubation period for the eggs.

In addition to being affected by the external world, an embryo developing in an egg also sends out its own signals to its mother and fellow embryos. It begins to send out signals roughly by the 15th day of incubation -- a type of click that contains valuable information concerning its development. The "chicken telegraph" reports on the formation of a young chicken: irregular and solitary clicking testifies to the initial and timid attempts by an embryo to

regulate its breathing and continuous and loud clicking -- a stronger and correctly functioning lung system. The more rhythmic and more frequent the clicks, the nearer the hatching process.

There is always a leader in a hen's clutch of eggs, one which surpasses the others in development. The remainder, while attempting to keep pace with the rate of development of the leader, emerge from their eggs almost simultaneously. At the same time, the signals of this as yet unhatched leader prompt the brood hen as to when the fledglings will emerge. It urges on the backward ones by cackling and tapping on the shells of the eggs with its beak.

The incubator brooder contains hundreds of trays, each of which has its own dominant. Thus discord during the hatching process is natural. In order to eliminate anarchy, a majority of the local "tray" must be replaced by one which sets the tempo immediately for 1,000 chicks. The speakers of "Sinkhrotemp" serve as just such a leader; they generate clicks with the frequency emitted by the embryo-leader. The clicking sounds are supplemented by tonal ones which simulate the voice of the mother during the hatching of the fledglings.

At the same time, "Sinkhrotemp" stimulates the development of a future chick by optical effects.

Under natural conditions, the brood-hen turns over the eggs, moves them about, exposes them to light, shields them against heat and periodically leaves the clutch of eggs. Thus, metabolism is activated in an egg and embryo growth is accelerated.

Blinking lights create a life-giving play of light under artificial conditions. The frequency of the blinking (3 cycles per second) conforms to the pulsation of the heart and the biorhythm of the embryo.

Combined acoustic and light effects have produced good results. The hatching rate for chicks has been raised several percent and indeed an increase of just 1 percent is equivalent to an increase of from 140 to 250 million head of poultry in the RSFSR alone. The hatching period has been reduced by a factor of 1.5-2 and the incubation period -- by 20 hours. In all, the technological cycle has been reduced by almost 24 hours and this has made it possible to make more time available for the sanitary and prophylactic processing of facilities and equipment.

The effectiveness of use of "Sinkhrotemp" is being combined with its simplicity of design and ease of operation. From the impulse generator, a signal is released in two directions: from a power amplifier to a speaker and through a circuit breaker to incandescent lamps.

The lamps and speaker are located in the brooder in a manner such that no injury can be sustained by the young chicks. Thus the "Sinkhrotemp" is capable of simultaneously servicing three brooders.

From the moment a chick enters the growing department, its daily routine is thereafter determined by "Broyler," the task of which is to control the

nutritional reaction of a young chick by recreating the signals sent by a hen. Once every half hour a time mechanism actuates a food relay network and for a period of 5 minutes the cackling of a brood-hen that has found food is heard. Upon hearing the cackling, the young chicks feed calmly, with less nervousness and with considerably better appetites. No scuffles occur at the feeding trough and the food is not scattered about the floor.

Rooster or Hen?

It is not only in incubators but also at meat poultry factories that attempts are made to prevent the dangerous consequences of a chicken hierarchy, wherein the weak suffer at the hands of the strong. And here task number one is that of dividing up the chicks according to sex. The sorting of young chicks into rooster and hen groups is difficult and unpleasant work. Indeed the males and females, prior to the appearance of the combs, do not differ from one another in terms of color, size or other external characteristics.

The sex of a young chick is determined according to the number of tubercles in the cloaca and in the process it must almost be turned inside out. Thus even before it stands on its legs, a young chick is in danger of being seriously injured.

The new radio electronic device "Diapazon" is called upon not only to aid man but also to display concern for the well-being of a young chick.

The action of the "Diapazon" is based upon the fact that in a state of discomfort the frequency of sounds emitted by 1-day old roosters and hens differs. In the case of females, the voice is more clear and "alarm" signals are issued more frequently. The mournful peep of a chick that has toppled over is picked up by a microphone and converted by the device into impulses which light up a particular lamp on the panel.

For a sound frequency of 4.2 - 4.5 kilohertz, which is typical of hens, a lamp of one color lights up and for a frequency of 5.0 - 5.5 kilohertz, which indicates that a rooster is in front of the device -- a lamp of another color.

As a result of use of the "Diapazon" device, the labor productivity of the operators increased twofold.

The equipment that has been created is undergoing testing at a number of poultry factories. The results are extremely reassuring. The task is now one of creating an industrial model for "Signal," one which will possess a sufficiently high reliability, and thereafter turning it over for series production. This will make it possible to facilitate substantially the solving of one of the tasks of the Food Program -- by 1990, increasing meat and poultry production (compared to 1980) by one and a half times and raising the per capita number of eggs to 266.

7026
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REGIONAL DEVELOPMENT

LAGGING TURKMEN AGRICULTURAL DEVELOPMENT OF CONCERN TO PARTY

Moscow PRAVDA in Russian 19 Aug 85 p 2

/Article by A. Grachev, Ye. Grigoryev and S. Pastukhov, Turkmen SSR: "Salt of the Earth"/

/Text/ From Ashkhabad one can fly to Krasnovodsk, Tashauz, Mary and Chardzhou -- oblast centers of the Turkmen SSR. Different areas and yet the same picture under the wing -- sand, sand and more sand. This is the Kara-Kum Desert -- vast, hot and dry.

Nevertheless, the Kara-Kum Desert can be referred to only in a relative sense. People live and work here in all areas. The republic occupies second place in the country in terms of the number of diverse types of plants grown here. It is considered to be a rich area for agricultural development based upon an abundance of sunlight and warmth. This is borne out by the experience of local farmers and livestock breeders.

Last year they fulfilled ahead of schedule their plans for 4 years of the five-year plan for procurements of fine-fibered varieties of cotton, grain, vegetables, melon crops, cocoons, livestock and poultry, eggs, wool and karakuls. An increase took place in the number of cattle. Such leading kolkhozes as Teze Yel in Bayram-Aliyskiy, imeni Kirov in Takhta-Bazarskiy, imeni Kuybyshev and imeni Telman Takhtinskiy and 40 Let TSSR in Tashauzskiy rayons and many others obtained 40-50 quintals of raw cotton per hectare. There are also farms which are obtaining similar quantities of grain and the brigade of Ya. Khemrayev at the Komsomol Kolkhoz in Chardzhouskiy Rayon obtained a 90 quintal yield of corn grain.

And still there is no basis for a great amount of joy. On the whole, the republic's cotton growers did not cope with their plan for supplying the state with products and they have fallen behind in carrying out their tasks for the five-year plan. The plan for overall grain yield was fulfilled by 87 percent. The corn yield on the average amounted to two thirds of the figure planned. Over the past 10 years, the cotton, grain and vegetable yields per hectare throughout the republic remained at the same level. Almost no increase has been noted in the productivity of the cows and sheep. The value of the fixed productive capital in agriculture is increasing and the return from such capital is decreasing. In terms of a number of the more important indicators, the branch is not moving forward and in fact it is even falling backward in the case of a number of positions.

Some of those we spoke to throughout the republic, in explaining the reasons for such "marching in place," invariably complained regarding the stern natural conditions. They indicated that the desert dictated its own conditions and that these conditions lowered the coefficient of useful activity to a considerable degree. For example, the Murgab River has now become shallow.

"Our farming is completely irrigated" stated M. Charyyev, secretary of the Central Committee of the Communist Party of Turkmenistan and a spokesman for agricultural matters, "We would obtain nothing if our fields were not irrigated. Water is required everywhere and thus our Turkmen workers have always been very sparing in their use of water."

Yes, since ancient times the Turkmen SSR has suffered from a shortage of water. But today the situation has changed to a large degree. On this same old and shallow Murgab River, a cascade of powerful pumps delivers moisture from the Kara-Kum Canal. It crosses the desert from east to west over a distance of 1,100 kilometers. As a result, over the past four centuries the area of irrigated land in the republic has increased considerably and now totals 1,130,000 hectares. With the delivery of water to the Kara-Kum Desert, the agricultural workers were provided with a strong foundation for highly productive labor. However the results, as we have already mentioned, can and must be better.

And once again, strangely enough, water is the culprit. But no longer is it a shortage of water that troubles us but rather a surplus of it.

"Water has become cheap for us" stated the chief of administration for the Kara-Kum Canal Kh. Mamedov, "we are receiving 500 cubic meters from the Amu-Darya River at the rate of one hundredth of a kopeck per cubic meter."

The abundance (relatively speaking of course) of cheap water is by no means encouraging a thrifty attitude towards it and this is clearly evident, for example at the Khauzkhan Reservoir in Mary Oblast. This oblast is the republic's largest producer of cotton and it uses more than one half of the moisture being obtained from the Kara-Kum Canal, with a considerable portion of this amount going to the Khauzkhan Reservoir. An abundant sea lies in the very center of the desert. Here a brigade catches fish with the aid of nets and bathers are tanning themselves in the sun. This "sea" irrigates more than 80,000 hectares. A large tract of land.

But generally speaking the picture is a joyless one. Wherever one looks there are many fields which were productive at one time but which are empty today and appear to be covered with snow. This is the effect of salt. Salt of the earth in the direct sense. Some workers refer to this salt by way of attempting to justify their negative indicators. Mary Oblast, which formerly was praised for its high cotton yields, is now considered to be a backward oblast in this respect.

But where did the salt come from? Why is it that the fields are no longer thriving?

"We like to refer to the term "anthropogenic devastation" explained the director of the Turkmen Scientific-Research Institute of Soil Science

B. Ravshanov, "here I have in mind the loss of soil capability to produce good yields as a result of a stupid and irresponsible attitude on the part of man."

In particular, this is exactly what happened in the case of the Khauzkhan Reservoir. The bed of the reservoir had not been prepared to receive water and thus it escaped through the sandy bottom just as it might through a sieve, thus strongly influencing the mineralized ground waters. As a result, the latter rose up closer to the surface and brought salt with them -- "white poison." This was one half of the story. The other half -- the administrative organs, thinking only in terms of momentary gain, were in no hurry to invest resources in the construction of a reliable collector-drainage network. The water used out on the fields could not be discharged anywhere and it also joined with the ground water and this promoted even more the devastation of the land. Artificial salt marshes are developing and secondary soil salinization is taking place. The yields for cotton and other crops are declining. A similar situation has developed in many other regions of Turkmenia -- in those areas where land development is being carried out in an incomplete and unsystematic manner. And the party organs are tolerating this. On the average for the republic, a collector drainage network for a hectare of irrigated area costs less by a factor of 2.5 than the figure expected. Almost two fifths of the republic's irrigated territory has been subjected to secondary salinization and, as a result, the kolkhozes and sovkhozes annually suffer a shortfall in cotton production on the order of 350,000 - 400,000 tons. This is equivalent to approximately one third of the raw cotton produced in the republic last year or roughly as much as is being furnished by Mary Oblast.

Today the Turkmen SSR is eliminating the entire oblast from its cotton potential! Nor do these constitute all of the losses. Quite often an irrigation network is also built on an earthen bed without hydraulic sealing. A large portion of the water returns once again to the sand and pours down the sides. Thus, one half million hectares of pasture land were flooded in Tedzhenskiy, Kirovskiy and Kaakhkinskiy rayons alone, land on which more than 10,000 sheep had been grazing. The earth-mother that had fed the people had become a step mother to them.

The figures and facts which we have cited do not come as a revelation to the party and other leaders of the republic. Specialists in the various areas, scientists and the press long ago sounded the alarm and they are now proposing new and better means for developing the Kara-Kum Desert. However, upon reading the republic newspaper TURKMENSKAYA ISKRA or the journal SELSKOYE KHOZYAYSTVO TURKMENISTANA, in which these methods are being publicized, and upon becoming acquainted with the status of affairs in the various areas, one automatically draws the conclusion that the respected organs of the press and their authors are uttering words in vain. The opinions of competent people and the criticism being raised from "top to bottom" are going unheeded.

Thus mismanagement is flourishing. Here is a typical fact. Four years ago, Glavkarakumstroy built the Archmanskiy Distribution Canal in Bakhardenskiy Rayon at a cost of more than 1,700,000 rubles. The mainline was accepted with a grade of "good" and still the farmers have received very little water from it: of the two discharge openings of the water intake installation, only one

was in operation -- the other had become clogged with sand during construction. The canal became filled with silt and unsuitable for use. As a result of poor workmanship, many fields were not supplied with water this summer and thus they dried up and were written off.

Or permit me to cite still another example. During this five-year plan, the deliveries of mineral fertilizers to the republic increased considerably. Over the past 4 years, the kolkhozes and sovkhozes were supplied with 988,000 tons of mineral fertilizer in a conversion for a 100 percent nutrient content and yet the return from the fields as a result of such fertilizer is not increasing. People's controllers inspected the subunits of Turkmenselkhozkhimiya and noted that the mineral fertilizers are simply not being delivered to the plantations. They are being stored outdoors and, as a result, a considerable portion of the mineral fertilizer is spoiling. Rail-served mechanized storehouses for accepting pesticides and liquid feed preservatives are not being built throughout the republic. There have been frequent incidents of mineral fertilizers and chemicals being applied to fields in the absence of weighing.

Thus the material is being poured and applied with no measurements being taken. And indeed each cubic meter of water that is wasted and each kilogram of fertilizer that is lost to the wind affects first of all the dining tables of the workers. During the current five-year plan, the consumption of meat and eggs per capita in Turkmenia has increased somewhat, but this has been achieved mainly at someone else's expense. The republic is consuming more products than it is producing. How can this be? There is an abundance of sun, warmth and earth. It would also seem that a strong logistical base has been created in the rural areas and that sufficient labor reserves are on hand.

"The republic supplies the country with cotton" we were told in the Department of Agriculture and Food Industry of the Central Committee of the Communist Party of Turkmenistan, "This is its main obligation and concern. And it does not possess the potential for accomplishing anything more: as the saying goes, you cannot hold two watermelons in one hand."

What can one say here? Even a very witty saying concerning neglect in a particular sector of work will neither justify or correct the status of affairs. Truly, the country waits for the Turkmen cotton -- in greater amounts and in improved quality. It is correct to state that a maximum amount of attention must be given to this problem. But why must "watermelons" be juggled?" It is simply necessary to recall the existence of a second hand. This fact is often overlooked in the various areas.

For example, let us look in on the Ashkhabad Kolkhoz in Leninskiy Rayon in Tashauz Oblast, where the chairman is K. Saparov. The farm obtains a large amount of income from cotton. And livestock husbandry is in the background. The facilities are dilapidated and the cows are gaunt. They are milked and the farmyard manure is collected manually. A similar picture prevails at many other farms in the rayon, where last year an average of only 1,836 kilograms of milk was obtained per cow. And indeed almost four feed units, that is, three times more than the norm, were expended for each kilogram of milk.

Yes and the productivity of the dairy cattle for the Turkmen SSR as a whole barely reached 2,200 kilograms. And wherever we happened to be -- in Ashkhabad,

Mary, Chardzhou or Tashauz oblasts -- there were overexpenditures of funds, feed and labor on farms almost everywhere. Livestock husbandry, notwithstanding considerable increases in the purchase prices for its products, continues to remain unprofitable on a majority of farms. Here they do not wish to work "with two hands." And the party organs consider this to be proper.

Cotton has become an exclusive crop on the republic's fields. It is the personal concern of the 1st secretary of the Central Committee of the Communist Party of Turkmenistan M. Gapurov, the 1st deputy chairman of the Turkmen Council of Ministers and chairman of the Committee on Problems of the Agroindustrial Complex G. Mishchenko and other leaders. The concern for feed is displayed mainly in the form of words. The plans for procuring hay, root crops and grass meal throughout the republic are from year to year not being fulfilled and the requirement for supplying the livestock with internally produced feed is being fulfilled by not more than 25-30 percent.

We visited the Molochnyy Specialized Sovkhoz in Gyaurskiy Rayon in Ashkhabad Oblast. This farm, on the basis of all available data, is ranked among the weaker farms. We wished to learn why. We suddenly were provided with other information.

"You wish to know the milk yields?" asked the director of the sovkhoz M. Atayev and thereafter he replied: "14-15 kilograms. The feed expenditures? One unit per liter. A collective contract? Yes there is one."

It turned out that the farm, prior to our reaching it, had been transformed into one of the best in the rayon and thereafter in the republic. We had to turn to some documents and the director was quickly demoted: the sovkhoz was actually consuming much more feed than the norm, the labor expenditures were excessive and the production costs surpassed the purchase prices to a considerable degree. And the collective contract flourishes only on paper.

One can understand the director's desire to embellish reality. But indeed the 1st secretary of the rayon party committee A. Muratdurdyyev sat alongside him. He sat and quietly listened to the boastful speeches of the other communist. It was a very unpleasant but not surprising development.

Boasting to an extreme and conceit without cause, under conditions involving weak party control, becomes for some leaders a typical and characteristic feature. The work on the sectors entrusted to their care does not always proceed well and they tell a different story -- they indicate that things are going well. A higher stage is even required so that they can share their "leading experience" and "entreat" and "assure." Subsequently, they remain quiet as was the case with cotton last year. Despite promises and decisions handed down by the party, they harvested less than called for in the task and yet this fact was not made known to any of the republic's leaders or to the press, nor did it find its way into any reports. To the contrary, once again emphasis was placed upon achievements. Such is the ingrained style.

Yes, we repeat that the republic fulfilled the plan for 4 years of the five-year plan for selling grain, melon crops, milk and eggs to the state. But one must also examine the other side of the problem: what was the situation with gross production? The kolkhozes and sovkhozes are not fulfilling such tasks for the

products mentioned above. There are still many farms which are overburdened with the purchase plans for livestock, poultry, milk and eggs. In a number of rayons, the milk procurements are being met only on the basis of obtaining some from the population. Large amounts of agricultural products are being lost during transport, storage and processing.

True, I did not wish to use such arithmetic or to mention such well known facts, but the truth is most important. In this particular instance, the truth is that the republic's agriculture is lagging behind today's requirements and it must find its way as rapidly as possible onto the modern path of development and creative search, discipline and order must be strengthened and scientific-technical progress accelerated.

The chief concern today consists of carrying out the work on a modern basis and achieving considerable and genuine success. This then is the essence of the problem or, figuratively speaking, the true salt of the earth, the salt of the work.

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AGRO-ECONOMICS AND ORGANIZATION

TASS CORRESPONDENT ON SOVKHOZ, KOLKHOZ TIES WITH PRIVATE PLOTS

LD161647 Moscow TASS International Service in Russian 1025 GMT 16 Sep 85

[Report by TASS correspondent Igor Galkin]

[Text] Moscow, 16 Sep (TASS)--TASS correspondent Igor Galkin writes: More than 35 million rural families in the USSR cultivate vegetable and fruit gardens next to their homes and keep livestock and poultry. These personal subsidiary plots provide them with meat, milk, fruit, and vegetables and produce one quarter of the country's agricultural produce. The proportion of the private sector in meat and milk production reaches 30 percent. Gross output in this sector has grown by 9.3 percent over 1980.

The importance of personal subsidiary plots lies primarily in the fact that the labor and material resources which cannot be used on the communal farms find application on them. Here pensioners and school and college pupils work to the best of their ability. The material resources are the small plots of land near the home, livestock quarters on private farms and waste food.

Thanks to a high labor productivity on sovkhozes and kolkhozes, production is growing much faster than on private farms. It is on their economic activity that the solution of the food problem in the USSR largely depends, the more so since many types of produce, such as grain, groats, and cotton, are not grown at all on private subsidiary farms.

These farms would not yield the present results if they existed in isolation from the public sector. Plots of land are granted for use by rural residents free of charge. Kolkhoz and sovkhoz farms help them work the subsidiary plots; they graze their livestock on kolkhoz and sovkhoz land; and they procure their fodder from there. On kolkhozes they usually acquire at cut prices young animals and fowl, feed and materials for building farm premises, and veterinary workers and agronomists, paid by the kolkhozes and sovkhozes, are obliged to serve them free of charge.

For the state there is no difference between private subsidiary farms and kolkhozes. It acquires agricultural produce from both at the same purchase prices. It is known that the state supports high purchase prices for meat, milk, and certain other produce, and low retail prices.

The difference is covered by a state grant which for meat alone amounts to some 20 billion rubles a year. An appropriate proportion of this grant goes into the hands of the owners of private farms. Incidentally, they can sell their produce to the state, consumer cooperatives, or on the market.

In rural areas now over 30 percent of families, mainly young, have no private subsidiary farms. They do not want to burden themselves with extra worry. Work on the kolkhozes and sovkhozes ensures them the necessary income.

Although the proportion of private farms in overall agricultural production is decreasing, economists and sociologists think that they will exist for a long time since they give people extra produce and income, and enable them to use the opportunities which life affords in the countryside, daily intercourse with nature. The state considers it to be its duty to support private subsidiary farms.

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AGRO-ECONOMICS AND ORGANIZATION

ELIGIBILITY FOR PRIVATE PLOTS PRIORITIZED BY OCCUPATION

Riga CINA in Latvian 22 May 85 p 2

/Article by U. Petersons, jurist: "Land Allocation"/

/Text/ How large an Area Should a Family Have? * The Decision Must be Justified to the Tenant * Organization of the Collectives' Vegetable Gardens * Use of the Service Lands * What to Note When Purchasing or Inheriting Buildings.

According to Paragraph 2 of the USSR Constitution, land belongs to the State. It cannot be the object of purchase, sale, gifting, or other transactions. Land is allocated for specific uses only.

The procedure by which citizens may obtain the right of use to a land parcel is set forth in the Latvian SSR Land Code as well as some other legislative documents. These legislative documents state: land is allocated for individual use; first, as a personal service plot for auxiliary farming; second, for the building or maintenance of a residence; and, third, for the establishment of a vegetable garden. In addition, plots are also allocated to citizens from Horticulture Society lands for the purpose of establishing gardens and building summer cottages.

The auxiliary land plot allocation procedure is set forth in the November 30, 1970 resolution of the USSR Soviet of Ministers, "Concerning the allocation norms of auxiliary land plots, service lands, vegetable gardens, grazing lands, fodder meadows, to workers and other citizens in the LaSSR agricultural districts, and the procedures for such land allocations." (LaSSR Compilation of Laws, fourth edition, pp 3-27.)

Land parcels of up to 0.50 hectare per family or farmstead are allocated to the permanent employees of state farms and other national agricultural industries, organizations and institutions, who live and work in rural areas, as well as to kolkhoz farmsteads. Parcel allocations from soviet agricultural or kolkhoz lands are made by the industry, organization or institution administrations or the kolkhoz plenum (plenipotentiary).

Auxiliary land plots of up to 0.25 hectare per family are allocated to such persons who live and work permanently in rural areas:

- general education, boarding school, kindergarten, boarding house, specialized school, pre-school, and supplemental education institution, infant housing, professional technical school, middle, special and other educational institution pedagogues and engineer-technical workers, trainers, lecturers, and management employees;

- medicine and pharmacy workers;

- working agronomes in agricultural industries, institutions and organizations, veterinarians, zoo technicians, land organizers and other agricultural specialists of highest and mid-specialist training, including accounting and economics workers;

- dairy and livestock industry workers;

- consumer cooperative and relations workers;

- village Soviet Executive Committee, village club and library employees;

- energy supply industry specialists engaged in farm electrification;

- ministry employees of the building material industry and construction ministry workers;

- regional internal affairs department militia squad district inspectors;

Land allocation decisions are made by the general assembly or kolkhoz plenipotentiary (if the affected persons live within kolkhoz territory), sovkhoz or other farm industry administration.

Auxiliary land parcels of up to 0.15 hectare per family are allocated to those workers or employees who reside in the country but do not fit any of the above-mentioned worker categories, as well as pensioners, invalids and other citizens residing in rural areas. The decision to allocate plots from lands under the direct authority of the Village Peoples Deputy Soviet is made by the village executive committee, from state reserve lands -- the regional executive committee. If a land parcel is allocated to these citizens from kolkhoz, sovkhoz, or other farm enterprise lands, general assembly (plenipotentiary) or administration decisions must be justified to the village Soviet Peoples Deputy Executive Committee.

Auxiliary land parcel allocations, according to the above-mentioned dimensions and guidelines, can also be received by sovkhoz employees who reside in cities and hamlets (except for republican subjection cities and regional centers).

Allocated land parcels can be used for personal supplemental farming, as also residences and farm buildings may be constructed on them, if in accordance

with the area's planning, then individual construction is allowed. Construction must be carried out in accordance with private building codes, which are affirmed in the LaSSR Soviet of Ministers resolution of July 13, 1982.

Workers, teachers, doctors and other specialists living or working in the country, as well as pensioners and invalids, who do not wish to take advantage of auxiliary land parcels, may receive plots for vegetable gardening of up to 0.15 hectare per family. These land plots are allocated for up to three years. They may be used for gardening, potato and other garden cultivation. The construction of buildings or planting of orchards on these parcels if prohibited.

These individual vegetable plots must be distinguished from collective vegetable gardens which are usually allocated to urban enterprises, organizations and institutions in accordance with Para. 75 of the Land Code, for term use of five years. These are meant for the workers of such enterprises, organizations and institutions. On these land parcels it is permitted to grow gardens, potatoes and other garden cultivation. If the land parcels are outside city limits, it is also permitted to plant fruit trees and berry bushes, build unheated greenhouses and temporary summer buildings for resting and the storage of garden implements.

As specified in Para. 115 of the Larvian Land Code, service lands are allocated to individual transport, forestry, timber, communications services, water, fishery and game farming, as well as other state agricultural department worker categories specified by the LaSSR Soviet of Ministers. Maximum size of such service lands is up to .05 hectare cultivatable land and up to 1.5 hectare meadow (if grazing livestock is included in the personal property).

Service lands are used for personal supplemental farming. Construction of buildings on them is prohibited.

City or hanlet dwellers who are not permanently employed and do not reside in rural areas do not have the right to receive auxiliary land plots or any other type of land parcels for their perpetual use. There is one exception to this general rule, which is specified in Para. 103 of the Land Code. Namely, if ownership rights to a building which is located in the country transfer to an heir who has no rights to an auxiliary land plot, he is allocated such a piece of land as is necessary for the upkeep of the building but no greater than 0.15 hectare, which includes the dimensions of these buildings. The same land parcel, designated for the upkeep of the building, is allocated to those citizens who own buildings in the country, but who have moved to the cities or other inhabited areas.

In accordance with Paragraph 89 of the Land Code, in urgan areas, along with the acquisition of building ownership rights, the right of use to the corresponding land parcel is also acquired. Otherwise it is only in cases where the building is located in the country. In Paragraph 74 of the Land Code it is stated that the acquisition of rights to buildings which are located on agricultural enterprise lands does not yet give land-use rights. Those must be acquired in accordance with the prescribed procedure. Therefore, a house in the country can only be purchased by such a person who could qualify for auxiliary land allocation. In accordance with this it is decreed that, upon the

signing and notarization of the home purchase and sales contract, the agreement of the kolkhoz plenum (plenipotentiary) or the sovkhoz administration to further authorize the land allocation to the new home owner must be requested. On the other hand, such an agreement can only be granted if the new home fits the citizen categories which have rights to auxiliary land parcel allocation, as specified by law. Without such an agreement a house can only be purchased for the purpose of tearing it down.

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AGRO-ECONOMICS AND ORGANIZATION

COMMENTARY ON EFFECTIVE IMPLEMENTATION OF COST ACCOUNTING

Moscow EKONOMICHESKAYA GAZETA in Russian No 32, Aug 85 p 16

[Commentary by Aleksandr Mikhaylovich Chursin, deputy chief of Main Economic Planning Administration: "Effective Cost Accounting for Each Unit"]

> [Text] Recently, the USSR Ministry of Agriculture established new basic positions relating to the organization of intraunit accounting at kolkhozes, sovkhozes and other agricultural enterprises. We asked Aleksandr Mikhaylovich Chursin, chief of the Main Economic P'anning Administration, to comment on this document.

The USSR Ministry of Agriculture set before agricultural organs the task of completing during 1985-1986 the introduction of cost accounting in all structural units of kolkhozes, sovkhozes and other agricultural enterprises with the use of a check form of operational control over production expenditures, first of all in brigades operating on a collective contract.

In this connection, not only the actual collectives of brigades, links and forms, but especially heads and specialists of farms have to concern themselves with the effectiveness of intrafarm accounting.

Ordinarily all work relating to introduction of cost accounting formerly consisted of completing targets for production collectives and at best control over their fulfillment. Now heads and specialists of agricultural enterprises have the responsibility of organizing the work of labor collectives on the basis of cost accounting and econnomic effectiveness of the sectors of work headed by them.

Rights of Collectives Have Been Expanded

Not only collectives engaged in farming and animal husbandry but also all other units of farms are being converted to intrafarm accounting: shops, garages, industrial production operations and enterprises, housing and public utilities, public eating enterprises and social, cultural and personal services. Structural subdivisions of agricultural enterprises are now considered cost-accounting in the event production capital is secured for them

and they are given plans for volume of production output (work, services), a wage fund, a target for growth of labor productivity (reduction of labor intensiveness) and limits (norms) of expenditure of material and monetary resources.

Economic cooperation among organizational units is based on mutual collective material interest and responsibility of the parties for the end results of production. The chairman of a kolkhoz or the director of a sovkhoz (other agricultural enterprise) in conformity with a concluded contract has the responsibility of providing cost-accounting units with everything necessary for the fulfillment of the plan of production output (work, services) set up by him. They must be provided with labor and material and technical resources corresponding to the system of production services and strictly adhere to the prescribed procedure of payment of labor and material incentives.

Cost-accounting units in turn are responsible for the fulfillment of the plan and socialist commitments relating to volume, production schedules, quality of production (work, services) and efficient use of agricultural land, labor and material resources placed in their charge.

Collectives of all cost-accounting units have now been granted broad rights. In particular, they examine drafts of production plans, work out measures ensuring their fulfillment and participate in the solution of questions of payment and stimulation of labor, upgrading of qualifications of workers and education of members of the collective. The collective gives its agreement to the designation of the head of the unit and has the right to demand of management his discharge if he has not justified their confidence.

Labor collectives have been granted broad rights in determination of the size of earnings and bonuses of each member of the unit (within the limits of the size of bonuses and earnings prescribed for the work results of the entire collective), taking into account real contribution to the common work results.

The collective of a cost-accounting unit can express dissatisfaction to management where the latter has not fulfilled contractual obligations and where it is to blame for nonattainment of plan indicators or overexpenditure of funds. Managers and specialists guilty of this are deprived completely or partially of bonuses paid for results of operational activity.

The Content of the Goal

Cost-accounting units under the supervision of chief specialists of an agricultural enterprise work out annual, quarterly and monthly plans for their work. At the same time, volume of production output (work, services) are determined on the basis of the concrete conditions of their work, adopted technology and available and allocated material resources.

Planned outlays are calculated according to norms of labor and material and monetary outlays per quintal of production, hectare of sowing, head of cattle according to technological cards or on the basis of average existing expenditures for the preceding period, taking into account the introduction of advanced technology and organization of production and exclusion of

nonproduction outlays. The composition of planned expenditures is determined in conformity with the functions of the specific cost-accounting unit.

Material resources of cost-accounting units (seeds, fodder, fertilizer, fuels and lubricating materials and others) both in the plan and in the report are calculated on the basis of a single rate. The work results of each cost-accounting unit are reflected monthly in production reports in which data on expenditures and production output, performed work and services are presented for the accounting month and as of the beginning of the year. For effective control of the use of material, labor and monetary funds, a check form of control of expenditures is used.

In totaling the work results of cost-accounting units, the actual volume of production of each variety of product in physical and cost terms and the actual outlays are compared with planned ones. Savings (overexpenditure) of production outlays are determined by the relation of their volume in the report to the planned ammount corrected for the actual volume of production (work, services).

Incentives and Accountability

The issue of bonuses to personnel of units may be done from the wage fund, the material-incentive fund or from a single source: for actual volume of gross production (work, services) corrected by the amount of savings (overexpenditure) of outlays versus the plan (limit): gross production (work, serivces) computed per thousand rubles of production costs compared to plan indicators; exceeding of attained level for volume of production output in cost terms; for fulfillment of plan of calculated gross income (cost of gross production according to calculated prices minus material outlays) and other indicators.

For the purpose of increasing the interest of cost-accounting units in end results, differentiated norms are established for deductions going into the material-incentive fund computed per thousand rubles of gross-production cost. They are used at the end of the year for determining the material-incentive fund of each unit.

Evaluation of cost-accounting activity for rewarding from the material-incentive fund of agronomic, zootechnical, veterinary, engineering, economic planning, accounting and other services is done on the basis of a generalizing indicator--the cost of the produced gross (commodity) production increased (reduced) by the amount of reduction (rise) of production cost (for general operational services--for the farm as a whole and for sectorial services--according to the corresponding sector).

This formerly was not specified by a regulation. Thus, in evaluation of the work of personnel of the agronomic service, fulfillment was taking into account of the plan of production and sale to the state of crop-growing products on the basis of product list and quality and of the plan of growth of labor productivity and its correlation with growth of the wage level and profitability of crop-growing sectors.

Cost-accounting unitsnow have collective responsibility for the results of their work which are determined by the management of the agricultural enterprise in agreement with the trade-union committee through determination of the cost of the damage subject to compensation.

A loss caused by one of the cost-accounting units to other cost-accounting units is compensated by ascribing its size to reduction of value of gross production (work, services) or increase of cost of production (work, services) of the unit to which it is charged and a corresponding increase by the amount of the incurred damage of the cost of gross production (work, services) or reduction of the cost of production (work, services) of the unit which caused the damage.

In addition to collective accountability, there is also designated in the unit the personal accountability of each person for observance of his duties. The basis for subjection of members of the collective of the cost-accounting unit to personal accountability is likewise the damage incurred.

7697
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AGRO-ECONOMICS AND ORGANIZATION

ACCOUNT OF ECONOMIC EXPERIMENT IN COUNTRYSIDE

LD171801 [Editorial Report] Moscow Domestic Service in Russian at 1440 GMT on 17 September carries a 20-minute program entitled "On the Eve of the Economic Experiment in the Countryside." "From 1 January 1986," the announcer says at the start of the program, "in a number of agroindustrial associations of the RSFSR economic experiments will be conducted to perfect management and the economic mechanism. Verification of the efficacity of the work of collective and state farms and other agricultural enterprises of certain krays and oblasts in the new conditions of planning of production, purchases and deliveries of produce, and assess the expediency of handing over enterprises and organizations of a number of ministries to the subordination of agroindustrial associations is envisaged." One of the rayons to start the experiment is Glazunovo Rayon, Orel Oblast.

Journalist Yevgeniy Parshin Parshin describes a recent visit to a farm in the rayon, the Zavety Ilyicha collective farm. Despite poor soil, good harvests have been obtained. A farm director says that the potato crop is good, and the income is high. Parshin says brigade contracting has been widely introduced in the rayon, with good results. A milkmaid speaks of good milk yields. She is a member of a financial autonomy unit. The economic experiment is a good thing, she says. A agricultural official of the rayon speaks of good contacts between farms and other organizations.

Yegor Semenovich Stroyev, first secretary of Orel Oblast Committee of the party, says "to put it briefly, the gist of the economic experiment is that on the land there be one master and the agroindustrial associations should bear all responsibility for fulfillment of the food program and should work according to the principle of self-management. But hitherto the agroindustrial complex has been managed and planned and financed via many channels; the final aim of the partners often do not coincide, which has a negative effect on development of agriculture." He says Glazunovo Rayon was selected for the experiment because since the start of the 11th 5-Year Plan it has embarked on widespread collective contracting and financial autonomy. Good results have been obtained. The rayon has no farms operating at a loss. Intensive cultivation is practiced.

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